Bot.
Serials
QK1
P81
no 9

National Museums of Canada

National Museum of Natural Sciences

Ottawa 1980

Publications in Botany, No. 9

A Catalogue of the Marine Algae of the Canadian Arctic

R. K. S. Lee

CALIFORNIA ACADEMY OF SCIENCES
JUN 30 1980
LIBRARY

Publications de botanique, nº 9

Musées nationaux du Canada

Musée national des Sciences naturelles

SHOUT
SHARE
IT

A Catalogue of the Marine Algae of the Canadian Arctic

R.K.S. Lee
Botany Division,
National Museum of Natural Sciences,
Ottawa.

National Museum of Natural Sciences
Publications in Botany, No. 9

Published by the
National Museums of Canada

© National Museums of Canada 1980

National Museum of Natural Sciences
National Museums of Canada
Ottawa, Canada

Catalogue No. NM 95-9/9

P0987654321

Y79

Printed in Canada

ISBN 0-662-00010-2
ISSN 0068-7987

Musée national des Sciences naturelles
Publications de botanique, n° 9

Publié par les
Musées nationaux du Canada

© Musées nationaux du Canada 1980

Musée national des Sciences naturelles
Musée nationaux du Canada
Ottawa, Canada

N° de catalogue NM 95-9/9

T0987654321

A79

Imprimé au Canada

ERRATUM

Add 2 to each number in the index to obtain the correct page reference.

National Museums
of Canada

National Museum
of Natural Sciences

Ottawa 1980

Publications
in Botany, No. 9

A Catalogue of the Marine Algae of the Canadian Arctic

R. K. S. Lee

Publications
de botanique, n° 9

Musées nationaux
du Canada

Musée national
des Sciences naturelles

Contents

Summary 3

Introduction 5

History 6

Aspects of the Plant Life 8

Methods and Content 10

Acknowledgements 15

Catalogue 17

- Chlorophyta 17
- Phaeophyta 30
- Rhodophyta 50

Collection Locations 67

References 74

Index to Species 79

Illustrations

Figure 1. Map of the Canadian Arctic 4

Summary

Benthic marine algae collected by scuba and dredging from 105 sites mostly in the northern and southwestern part of the Canadian Arctic are identified and catalogued with selected literature references, habitat notes, and frequency of occurrence. Each species is provided with a list of collection sites and herbarium reference numbers to voucher specimens. Included are species distribution records that have been reported in the literature. Of the 183 species and varieties from a total of 113 genera of Chlorophyta, Phaeophyta, and Rhodophyta, 37 are newly reported from the Canadian Arctic.

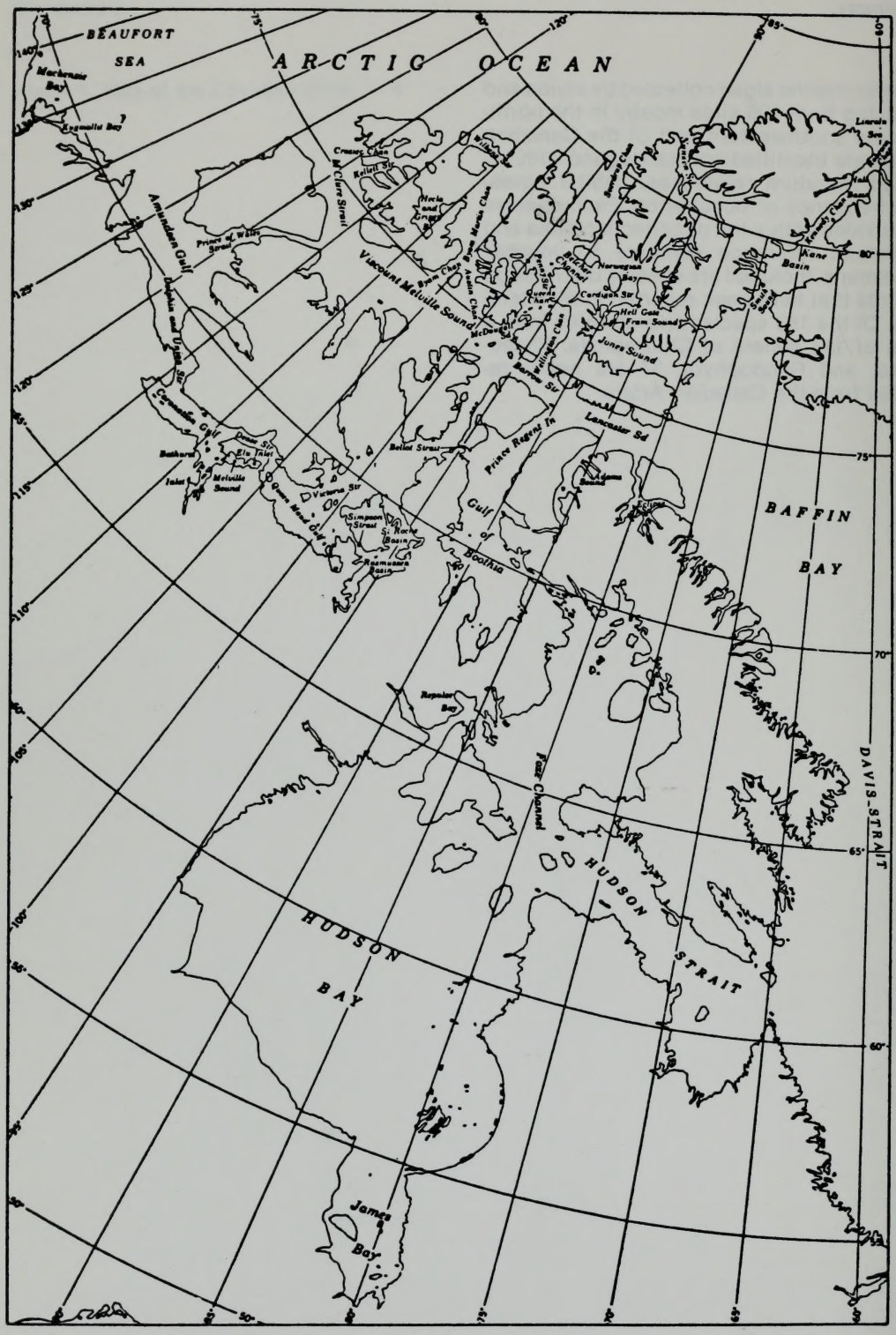

Figure 1. Map of the Canadian Arctic with major bodies of water mentioned in the text in relation to areas from which specimens were collected.

This paper is a compilation of available knowledge on the species composition, habitat, and distribution of the benthic marine algae of the Canadian Arctic (Fig. 1). Kjellman's (1883) work of nearly a century ago, "The Algae of the Arctic Sea", includes eight papers dealing with collections made from the eastern section of the Canadian Arctic. Taylor's (1957) manual on algae of the northwestern Atlantic is the only other study that has a compilation of species records for the Canadian Arctic. Besides a few new records, it includes data from six reports published after Kjellman's work, all but one of which are concerned with locations within the eastern Canadian Arctic. The references available to Kjellman and Taylor were mostly of short lists of species that were usually without habitat or collection data. They were reports made by phycologists upon receiving collections made by participants of sailing expeditions whose primary purpose was geographic exploration. Nearly all of these incidental — very likely drift — collections came from the eastern sector. With the few studies that followed similarly limited at least in geographical scope, there has never been a source of specimens that could be considered sufficiently adequate in any effort to compose a floristic knowledge of the Canadian Arctic algae.

The source material for this study is from a collecting survey conducted during 1967 to 1976 that involved more than 105 sites scattered through most of the Canadian Arctic. The object was to determine what species are present and where they occur.

As noted in the Introduction, most of the available references on marine algae in the Canadian Arctic are invariably linked with the historic geographical discovery and exploration of the region.

In 1819, his first of three expeditions to the Arctic, Captain John Franklin was sent by the British Admiralty to explore the mainland coast west of Boothia Peninsula by an overland route. Starting from York Factory in Hudson Bay, the expedition made an arduous journey westward for nearly a year before reaching Fort Enterprise, north of Great Slave Lake. In 1821, travelling in two canoes, they explored and mapped the south shores of Coronation Gulf and Dease Strait, including a part of Bathurst Inlet. Among those involved was John Richardson, surgeon and naturalist, who later gave a botanical account of the expedition. He (1823) recorded five species of algae, of which one, *Fucus ceranoides*, was marine. His comment about the *Fucus* (probably a *F. distichus*) was that "exclusive of a *Conferva*, and the fragment of a *Floridea* (Lam.), this was the only alga we observed in the Arctic Sea." Richardson secured and retained this and other biological data while participating in a vexing journey that was marked not only by foreseen hardships of the wilderness, but also by starvation, discontent, and murders.

Another very early collection was that made during Captain Sir Edward Parry's second Canadian Arctic voyage of 1821-1823. In search of a Northwest Passage, he was in command of the *Fury* and the *Hecla* which sailed into Hudson Strait and Foxe Channel to Repulse Bay and then northward into Foxe Basin. All of the botanical material collected was given to W.J. Hooker (1825), who identified nine algal species, nearly all with the annotation "floating on the Sea about the middle of Hudson's Strait".

The first report on Canadian Arctic algae to include specific locations and habitat information was made by Dickie (1852) based on specimens collected from Assistance Bay and Union Bay in Barrow Strait by Peter C. Sutherland, ship surgeon. Assistance Bay was a winter haven for the Admiralty brigs *Lady Franklin* and *Sophia* under the command of a whaler, Captain William Penny, who had instructions to trace the voyage of the now missing Captain Sir John Franklin and his men on the *Erebus* and *Terror*. Among the algal material dredged from the bay was a large, foliaceous red alga which Harvey (1853, see also Dickie 1852) described as a new species. It was named *Kallymenia pennyi* (now *Turnerella pennyi*) in honor of the able Captain Penny.

Dickie later published several additional papers, from 1853 to 1878, on materials he received from various British expeditions that entered Davis Strait, Baffin Bay, Prince Regent Inlet, and Nares Strait. Another early report was that of Harvey (1858), who similarly identified specimens collected during British expeditions. Most of his material consisted of a Northumberland Sound and Queens Channel collection made by David Lyall, M.D., during the 1852-54 voyages of the *Assistance* and *Pioneer* led by Captain Sir Edward Belcher in the last of the "Search for Franklin" expeditions to be sponsored by the British Government.

Beginning with Ashmead (1864), with the advent of American and Canadian sponsored expeditions, reports on Canadian Arctic algae were being made by North American phycologists. Ashmead's paper was based on specimens collected by Isaac I. Hayes, M.D., who was in command of the schooner *United States* on an American expedition to Smith Sound. Farlow (1879, 1886) produced species lists of the algae collected from Cumberland Sound by Ludwig Kumlien and from Ungava Bay by L.M. Turner. The paper by Setchell and Collins (1908) includes a James Bay collection that was made by William Spreadborough apparently for the National Herbarium of Canada. During the Canadian Arctic Expedition of 1913-18 to the western Canadian Arctic, Frits Johansen, zoologist, collected specimens from Alaska to Coronation Gulf that were later reported on by Collins (1927a). Johansen, whose collections are in the National Herbarium of Canada, later journeyed to Hudson Bay and James Bay and the specimens he obtained there were worked on by Howe (1927). Other phycological papers resulting from Canadian government activities were Collins (1927b) and Bell and MacFarlane (1933, 1938) chiefly on Hudson Strait and Hudson Bay algae, and Wheldon (1947) on a collection made by Nicholas Polunin in the eastern Canadian Arctic during 1934 and 1936.

Rosenvinge (1926) made a significant study on the Greenland and Canadian Arctic algae collected for the most part by H.G. Simmons during the Second Norwegian Arctic Expedition of 1898-1902. Under the leadership of Captain Otto Sverdrup, the expedi-

tion's legendary vessel *Fram*. F. Nansen's former ship, wintered in Rice Strait and Jones Sound over a four-year period. While sledding parties were discovering new islands west of Ellesmere Island, Simmons, who was a botanist and professor at Lund University, made an outstanding collection with extensive field notes, providing Rosenvinge with sufficient information for a discussion of the marine vegetation along with the catalogue of 61 species, half of which were new to the Canadian Arctic. Another Danish phycologist, Søren Lund, reported (1933) on the algae collected by G. Seidenfaden during the Godthaab Expedition of 1928 to western Greenland and two locations in the Canadian Arctic, Craig Harbour in Jones Sound, and Exeter Sound in northern Davis Strait. In contrast to the overall incidental and geographically restricted bits of information available on algae in the Canadian Arctic, the adjacent Greenland algae had already been well-documented in comprehensive investigations made by Rosenvinge (1893, 1898), Jónsson (1904), and later Lund (1959).

Up to 1954 — more than a century after John Richardson stepped on the shore of Coronation Gulf and wrote the first account of marine algae in the Canadian Arctic — no phycologist had ventured into Canadian Arctic waters. In 1954 and 1955, in conjunction with his study on the Labrador algae, Prof. R. T. Wilce, University of Massachusetts, gathered specimens and data on marine algal communities along the eastern side of Ungava Bay. His report (1959) is the first to be made by a phycologist as a direct result of his own field work in the Canadian Arctic. This ecological study, which includes species lists, was followed by others of a similar nature: Ellis and Wilce (1961) and Wilce (1968).

A student of Dr. Wilce, R. W. Lee, spent a season at Mould Bay, Crozier Channel, and his research there resulted in a Master's thesis (1966). Finally, in the course of the present species survey, I gave a general account (1973) on ecological aspects of the Canadian Arctic marine algae.

A discussion on the general ecology of the marine algae of the Canadian Arctic was given in an earlier paper (Lee 1973). Briefly, with increasing severity of ice cover, not only is there a shortening of the photosynthetic growth period, but there is also an effective decrease in wave action and salinity of the surface water. As a result of stability of the water column, nutrient transport may be a critical problem. These factors, interdependent because of their cause and effect relationship, seem to dominate the character of the marine environment. Their effect on the arctic plant life is not known. If nothing else, at this rudimentary stage of our comprehension of arctic marine ecology, they at least indicate environmental variability. Without pertinent field and laboratory studies, we can only speculate.

One of the points made in Lee (1973) was that the algal communities tend to be separated from each other because of the sporadic occurrence of suitable rocky substrates. Also mentioned was the presence of free-living communities lying on the silt and clay bottom of quiet bays. Subsequent scuba diving observations made at additional collecting sites revealed the presence of another, apparently more extensive, type of substrate. It is somewhat intermediate in that it is composed of mud (= silt and clay) with interspersed pebbles and cobbles. Sand is usually mixed with the mud. A 1975 analysis of the predominately mud substrate at Byam Channel (P. McLaren, manuscript) showed an inclusion of 10-33% sand and 0-22% gravel to cobbles. The latter material, and at times other solid objects such as the shells of bivalves and barnacles, provides an adequate base for attachment of the larger benthic algae.

The holdfast of a *Laminaria*, whether of the discoid or fibrous type, envelopes a single cobble or a few to many small stones. The anchorage afforded *in situ* was indicated by the light to at times heavy sediment burial of the holdfast of older plants. Another indication of development *in situ* was that when a plant lay prone with a portion of its stipe in contact with the substrate, that part of the stipe sometimes had adventitious holdfasts. In a contrasting type of growth habit like that of *Polysiphonia arctica,* the rhizoidal filaments of this branching alga spread in a network over the loose substrate.

These examples of attachment seem possible only if the unconsolidated substrate remains stable in the absence of sufficiently strong currents. A mud and pebble substrate under calm water is a prevailing feature of severe sea-ice conditions. In such a habitat the only evident major disruption of the substrate is that caused by grounded ice blocks. (A minor disruption is furrowing by walruses in search of shellfish.) A block of ice scraping over a vegetation covered bottom leaves a conspicuous denuded path (see also McLaren 1975). It is an infrequent phenomenon, taking place only when the ice block is thick enough to reach the vegetation.

There is a logical inverse relationship between the degree of sea-ice severity and the length of the seasonal photosynthetic period. Where the ice cover is 100% and permanent, as in some channels of the northwestern part of the Archipelago, there is no photoperiod and the underlying substrate lies barren. Where the 100% ice cover becomes broken, the following correlations between longevity of plant life and categories of broken ice conditions are predicted:

1. The frequency of break-up is irregular in that there is a year-to-year fluctuation: ephemeral vegetation.
2. There is an annual break-up but the open water interval is short: ephemeral vegetation.
3. Annual break-up, occurring comparatively early in the year and lasting to a late freeze-up: overwintering vegetation (characteristic of the eastern region).

When severe ice conditions prevail, as in many areas of the western section of the Archipelago, members of the benthic community developing in one short photoperiod lack sufficient reserve food to last the proceeding long dark period. The substrate is recolonized during a subsequent interval when the ice cover is broken and there is sunlight penetration through a crack in the ice or through broken ice fields*. The colonizing plants undergo an increasingly sustained and perhaps rapid rate of growth as the available light extends toward a 24 hr period.

A moderation of the long-lasting 100% ice cover condition to one of shorter duration provides for an extended growth season. Most of the eastern region of the Canadian Arctic can be placed in this category. Here

** Multiyear ice can be transparent enough for light to pass through. Its effect on benthic life is not known.*

there is a greater diversity of species (Lee 1973), the plants are larger, the communities are extensive, and long-lived forms like corallines, *Laminaria*, and *Agarum* display a morphological development requiring more than a single season of growth. Overwintering would not be possible without a degree of maturation sufficient to overcome the seasonal dark period.

Evidence that there is a cessation of growth during the dark winter period was derived from scuba observations (including those of P. McLaren, pers. comm.) made during early ice break-up in the western part of the Archipelago. It was found that (1) there was a recent colonization of the substrate indicated by the presence of tiny sporelings to small, young plants and the absence of large or reproductive individuals, (2) the attached vegetation was limited to that part of the substrate above which the ice cover was broken, and (3) even at the end of the melting season (not at the same sites or season) the *Laminaria* plants were young and small-sized. These plants sometimes had 20-25 cm long blades with as many as 5 or 6 increments of growth. The apparent growth interruptions could conceivably be related to intervals when the often present shifting ice temporarily created dark periods. The basic premise here is that with light extinction there is no growth and the problem is one of survival to the next available photoperiod. Of some relevancy, several dark-culture experiments (more recently, Smayda and Mitchell-Innes 1974), involving marine diatoms and other microalgae, have shown that many species are capable of surviving 90 days or more in the dark. None displayed any growth activity, and for some species, short intervals of reillumination or a lower temperature prolonged the dark-survival period. In the contrasting stance, Wilce (1967) gives a discussion on the possible occurrence of heterotrophy in arctic algae.

The presence or absence of vegetation may also be related to differences in salinity. In colder regions a summer-long persistence of a low salinity surface layer formed from ice melt (a distinct halocline was sometimes observed by divers) could be a major reason for the lack of growth in the intertidal zone down to a depth of 3 m or more. As already pointed out (Lee 1973), ice scouring is not the actual cause for the overall absence of intertidal growth. Peterson (1962, 1966) had drawn the same conclusion in his study on the biology and distribution of *Balanus balanoides* and *Littorina saxatilis* in Greenland.

According to scuba derived observations, most plant growth occurred within the depths of 2 and 15 m (water temperature ranges during the course of the survey were -0.7 to 9.3°C at 0 m, -1.5 to 9.0°C at 7-12 m). *Fucus*, when present, tended to be the dominant alga in the upper depths; *Laminaria* and crustose corallines at deeper depths. At some locations the separation of *Fucus* populations from those of *Laminaria* was clearly marked by a visible halocline. The deepest occurring macroscopic plants were *Laminaria groenlandica, L. saccharina,* and *L. solidungula* at 20-21 m at several sites, *Agarum cribrosum*, 21 m at Rigby Bay, and *Clathromorphum compactum* and *Lithothamnium laeve*, 27 m at Intrepid Bay.

Specimens were collected from some 105 sites, located mostly in the northern and southwestern part of the Canadian Arctic, after eight field seasons during 1967 to 1976. Most of the collections were made during July and August, the peak ice-melt period. Other collection times were late June and early September, which for portions of the Canadian Arctic approximates the time of year when the sea ice starts to break and subsequently reform. From 1967 to 1970, subtidal specimens were collected by dredging, usually from a pneumatic boat powered by an outboard motor. Subsequent collections were by scuba techniques, starting with the wet suit then eventually utilizing the inflatable dry suit with antifreeze precautions in the regulator system and a full-face mask equipped with transmitter and receiver. Transportation to the collecting sites was by necessity almost exclusively by helicopter.

In addition to these museum-sponsored expeditions, an extensive collection made by scuba diving at 14 sites was provided by Patrick McLaren, Geological Survey of Canada, from his 1974 marine geology study of Byam Channel. This contemporaneous collection and another, significant because of the species involved, from a James Bay location by Fred N. Cowell, Polar Bear Provincial Park, were made in behalf of the museum and they have been incorporated into the survey.

Specimens of these collections and those of others in the algal collection (CANA) of the National Museum of Natural Sciences are the basis of the *New Records* tabulation in the species catalogue. They can be identified as follows:

a. Numbers prefixed by *DH* are collections made by P. McLaren, with D. Frobel, S. McLean, and C. Locat.
b. Hyphenated numbers beginning with *60, 62, 63,* or *66* (they indicate the year) are collections made during expeditions of the Arctic Biological Station, Fisheries Research Board of Canada.
c. Hyphenated numbers beginning with *74* (the year) are collections made by D. E. McAllister and J. Boom for the present study.
d. Where the museum accession number (preceded by *CANA*) is given, the collectors were, for example, F. N. Cowell, and D. E. McAllister and J. G. Hunter.
e. A few numbers are associated with the name of the collector: R. Coleman, H. Crum, C. R. Harington, J. R. Riley, D. B. O. Savile, and J. W. Tyrrell.
f. Numbers of four digits only are my own, which also represent scuba collections made by J. Boom, D. Kittle, R. Long, P. Newroth, and S. van Haarten.

The CANA herbarium also contains an incomplete set of specimens collected during the Canadian Arctic Expedition of 1913-1918 by F. Johansen and reported on by Collins (1927a). A 1920 collection from Hudson Bay and James Bay (Howe 1927) also collected by Johansen, is in the CANA herbarium. Where a literature record can be associated with a herbarium specimen I have examined, the herbarium accession number has been cited along with the published reference. Also examined were Canadian Arctic (Rosenvinge 1926) and Greenland specimens in the Botanical Museum of the University of Copenhagen, the Botanical Museum of the University of Lund, the Swedish Museum of Natural History in Stockholm, and the Botanical Museum of the University of Uppsala. For these the only ones cited are those that entailed a significant nomenclatural or taxonomic change.

The catalogue is made up of 183 species to varieties, including 37 previously unknown from the Canadian Arctic, from a total of 113 genera of Chlorophyta, Phaeophyta, and Rhodophyta. Fifty-seven of the subgenera are members of the Chlorophyta, 68 are of the Phaeophyta, and 58, the Rhodophyta. Each taxon is annotated with taxonomic references (selected mostly for their arctic content), general habitat information, and records of distribution. Unless indicated otherwise, remarks on the habitat are based solely on scuba derived observations.

The locations of the distributional records are in a north to south and east to west arrangement within the major geographical categories of the EASTERN, SOUTHWESTERN, and NORTHWESTERN Canadian Arctic. The boundary of the eastern sector is from Robeson Channel to Cardigan Strait, Bellot Strait, Hudson Bay, and James Bay (Fig. 1). M'Clure Strait, Viscount Melville Sound, and Barrow Strait separate the northwest from the southwest. Only one of usually several voucher specimens is cited from a collection made at a given site. The specimens are available for study in the National Herbarium, Botany Division of the National Museum of Natural Sciences, Ottawa.

The following is a checklist of the species catalogued. Those in boldface are new records.

CHLOROPHYCEAE
Volvocales
Palmellaceae
Gloeocystis
scopulorum Hansgirg

Chlorococcales
Characiaceae
Codiolum
gregarium A. Braun
pusillum (Lyngbye) Kjellman
Endosphaeraceae
Chlorochytrium
dermatocolax Reinke
inclusum Kjellman
schmitzii Rosenvinge
Gomontia
polyrhiza (Lagerheim) Bornet and Flahault
Phyllosiphonaceae
Ostreobium
quekettii Bornet and Flahault

Prasiolales
Prasiolaceae
Prasiola
johanseni Collins
Rosenvingiella
polyrhiza (Rosenvinge) Silva

Ulotrichales
Ulotrichaceae
Ulothrix
flacca (Dillwyn) Thuret
laetevirens (Hooker) Collins
pseudoflacca Wille
subflaccida Wille

Ulvales
Capsosiphonaceae
Capsosiphon
fulvescens (C. Agardh) Setchell and Gardner
Percursariaceae
Percursaria
percursa (C. Agardh) Rosenvinge

Monostromataceae
Blidingia
marginata (J. Agardh) P. Dangeard
subsp. *marginata*
subsp. ***subsala*** (Kjellman) Bliding
minima (Nägeli) Kylin
var. ***minima***
var. *ramifera* Bliding
Kornmannia
leptoderma (Kjellman) Bliding
Monostroma
arcticum Wittrock
Ulvaceae
Enteromorpha
clathrata (Roth) Greville
compressa (Linnaeus) Greville
crinita (Roth) J. Agardh
flexuosa (Wulfen) J. Agardh
subsp. *paradoxa* (Dillwyn) Bliding
groenlandica (J. Agardh) Setchell and Gardner
intestinalis (Linnaeus) Link
linza (Linnaeus) J. Agardh
prolifera (O. F. Müller) J. Agardh
Ulva
lactuca Linnaeus
rigida C. Agardh
Ulvaria
obscura (Kützing) Gayral
var. *blyttii* (Areschoug) Bliding
oxysperma (Kützing) Bliding

Chaetophorales
Chaetophoraceae
Acrochaete
repens Pringsheim
Arthrochaete
penetrans Rosenvinge
Bolbocoleon
piliferum Pringsheim
Chaetobolus
gibbus Rosenvinge
Ectochaete
leptochaete (Huber) Wille
wittrockii (Wille) Kylin
Entocladia
viridis Reinke
Epicladia
flustrae Reinke
Pringsheimiella
scutata (Reinke) Marchewianka
Pseudendoclonium
submarinum Wille
Pseudopringsheimia
confluens (Rosenvinge) Wille
fucicola (Rosenvinge) Wille
Chroolepidaceae
Pilinia
endophytica Collins

Acrosiphoniales
Acrosiphoniaceae
Urospora

mirabilis Areschoug
wormskjoldii (Mertens) Rosenvinge
Acrosiphonia
arcta (Dillwyn) J. Agardh
hystrix (Strömfelt) Jónsson
Spongomorpha
aeruginosa (Linnaeus) Hoek

Cladophorales
Cladophoraceae
Rhizoclonium
riparium (Roth) Harvey
Chaetomorpha
linum (O. F. Müller) Kützing
melagonium (Weber and Mohr) Kützing
Cladophora
sericea (Hudson) Kützing
sp.

PHAEOPHYCEAE
Ectocarpales
Ectocarpaceae
Pilayella
littoralis (Linnaeus) Kjellman
Ectocarpus
fasciculatus Harvey
siliculosus (Dillwyn) Lyngbye
Giffordia
ovata (Kjellman) Kylin
Laminariocolax
tomentosoides (Farlow) Kylin
Streblonema
stilophorae (Crouan and Crouan) Hamel
Kolderupia
maritima (Kjellman) S. Lund
Phaeostroma
parasiticum Børgesen
pustulosum Kuckuck
Ralfsiaceae
Symphyocarpus
strangulans Rosenvinge
Ralfsia
clavata (Harvey) Crouan and Crouan
fungiformis (Gunner) Setchell and Gardner
ovata Rosenvinge
verrucosa (Areschoug) J. Agardh
Sorapion
kjellmanii (Wille) Rosenvinge
Lithoderma
fasticens Areschoug
Pseudolithoderma
extensum (Crouan and Crouan) S. Lund
rosenvingii (Waern) S. Lund
subextensum (Waern) S. Lund

Sphacelariales
Sphacelariaceae
Sphacelaria
arctica Harvey
cirrosa (Roth) C. Agardh
plumosa Lyngbye
radicans (Dillwyn) C. Agardh

Tilopteridales
Tilopteridaceae
Haplospora
globosa Kjellman

Chordariales
Myrionemataceae
Dermatocelis
laminariae Rosenvinge
Hecatonema
foecundum (Strömfelt) Loiseaux
maculans (Collins) Sauvageau
Leptonematella
fasciculata (Reinke) Silva
Microsporangium
globosum Reinke
Myrionema
aecidioides (Rosenvinge) Sauvageau
strangulans Greville
Elachistaceae
Elachista
fucicola (Velley) Areschoug
Chordariaceae
Eudesme
virescens (Carmichael) J. Agardh
Chordaria
flagelliformis (O. F. Müller) C. Agardh

Desmarestiales
Desmarestiaceae
Desmarestia
aculeata (Linnaeus) Lamouroux
viridis (O. F. Müller) Lamouroux

Dictyosiphonales
Striariaceae
Isthmoplea
sphaerophora (Carmichael) Kjellman
Stictyosiphon
tortilis (Ruprecht) Reinke
Punctariaceae
Litosiphon
filiformis (Reinke) Batters
Desmotrichum
undulatum (J. Agardh) Reinke
Punctaria
glacialis Rosenvinge

plantaginea (Roth) Greville
Petalonia
fascia (O. F. Müller) Kuntze
Scytosiphon
lomentaria (Lyngbye) C. Agardh
Asperococcus
echinatus (Mertens) Greville
Omphalophyllum
ulvaceum Rosenvinge
Dictyosiphonaceae
Coilodesme
bulligera Strömfelt
Dictyosiphon
foeniculaceus (Hudson) Greville

Laminariales
Chordaceae
Chorda
filum (Linnaeus) Lamouroux
tomentosa Lyngbye
Laminariaceae
Saccorhiza
dermatodea (De la Pylaie) J. Agardh
Laminaria
agardhii Kjellman
digitata (Hudson) Lamouroux
groenlandica Rosenvinge
longicruris De la Pylaie
nigripes J. Agardh
saccharina (Linnaeus) Lamouroux
solidungula J. Agardh
Agarum
cribrosum Bory
Alariaceae
Alaria
esculenta (Linnaeus) Greville
grandifolia J. Agardh
pylaii (Bory) Greville

Fucales
Fucaceae
Fucus
distichus Linnaeus
subsp. *distichus*
subsp. *anceps* (Harvey and Ward) Powell
subsp. *edentatus* (De la Pylaie) Powell
subsp. *evanescens* (C. Agardh) Powell
vesiculosus Linnaeus
Ascophyllum
nodosum (Linnaeus) Le Jolis

RHODOPHYCEAE
Bangiales
Bangiaceae
Erythrotrichia
carnea (Dillwyn) J. Agardh
Erythrocladia
irregularis Rosenvinge
polystromatica P. Dangeard
Erythropeltis
discigera (Berthold) Schmitz
var. ***flustrae*** Batters
Porphyra
miniata (C. Agardh) C. Agardh
purpurea (Roth) C. Agardh

Nemaliales
Acrochaetiaceae
Acrochaetium
parvulum (Kylin) Hoyt
Audouinella
efflorescens (J. Agardh) Papenfuss
hallandicum (Kylin) Woelkerling
purpurea (Lightfoot) Woelkerling
spetsbergense (Kjellman) Woelkerling
Colaconema
membranacea (Magnus) Woelkerling

Cryptonemiales
Dumontiaceae
Dumontia
incrassata (O. F. Müller) Lamouroux
Neodilsea
integra (Kjellman) Zinova
Squamariaceae
Peyssonelia
johanseni Howe
rosenvingii Schmitz
Rhodophysema
elegans (Crouan and Crouan) Dixon
Halosacciocolax
kjellmanii S. Lund
lundii Edelstein
Hildenbrandiaceae
Hildenbrandia
prototypus Nardo
Corallinaceae
Clathromorphum
compactum (Kjellman) Foslie
Lithothamnium
foecundum Kjellman
glaciale Kjellman
laeve (Strömfelt) Foslie
Phymatolithon
laevigatum (Foslie) Foslie
polymorphum (Linnaeus) Foslie
Kallymeniaceae
Callophyllis
cristata (C. Agardh) Kützing
Kallymenia

schmitzii De Toni
Choreocolaceae
Choreocolax
odonthaliae Levring
Harveyella
mirabilis (Reinsch) Schmitz and Reinke

Gigartinales
Cruoriaceae
Cruoria
arctica Schmitz
Cruoriopsis
hyperborea Rosenvinge
Petrocelis
polygyna (Kjellman) Schmitz
sp.
Solieriaceae
Turnerella
pennyi (Harvey) Schmitz
Rhodophyllidaceae
Rhodophyllis
dichotoma (Lepeschkin) Gobi
Phyllophoraceae
Ahnfeltia
plicata (Hudson) Fries
Phyllophora
truncata (Pallas) Newroth and Taylor
Ceratocolax
hartzii Rosenvinge

Rhodymeniales
Rhodymeniaceae
Halosaccion
ramentaceum (Linnaeus) J. Agardh
Rhodymenia
palmata (Linnaeus) Greville

Ceramiales
Ceramiaceae
Antithamnion
americanum (Harvey) Farlow
boreale (Gobi) Kjellman
pylaisaei (Montagne) Kjellman
Ceramium
rubrum (Hudson) C. Agardh
tenuissimum (Roth) J. Agardh
Ptilota
pectinata (Gunnerus) Kjellman
plumosa (Hudson) C. Agardh
Delesseriaceae
Membranoptera
alata (Hudson) Stackhouse
denticulata (Montagne) Kylin
Pantoneura
angustissima (Turner) Kylin
baerii (Postels and Ruprecht) Kylin
Phycodrys
rubens (Linnaeus) Batters
Rhodomelaceae
Polysiphonia
arctica J. Agardh
urceolata (Lightfoot) Greville
Rhodomela
confervoides (Hudson) Silva
lycopodioides (Linnaeus) C. Agardh
Odonthalia
dentata (Linnaeus) Lyngbye

Acknowledgements

The degree of accomplishment of a survey of this type in the Canadian Arctic is dependent on the logistic support of various agencies. In 1967, when the survey was initiated, I was given full support by the Northern Services Division, Department of Indian Affairs and Northern Development, by arranging my participation on the annual Eastern Arctic Patrol on the C.C.G.S. *C.D. Howe*. For the field seasons of 1968 to 1970, I should like to single out the Polar Continental Shelf Project, Department of Energy, Mines & Resources, for its aircraft, boat, and other logistic support, without which I would not have been able to continue the survey.

Even with financial support from the museum itself from 1973 to 1976, which provided for helicopter chartering exclusively for the project, limited facilities and services in the Archipelago required planning and coordination with numerous agencies. For making available their field support, I am grateful to these institutions and the staff involved: Polar Continental Shelf Project, Air Operations and Training unit and Supplementary Radio System unit of the Department of National Defense, Department of the Environment, Department of Indian Affairs and Northern Development, R.C.M.P., Bradley Air Services, Pan Arctic Oil, KAP Transport, Okanagan Helicopters, and Aero Arctic Ltd.

My thanks to the curators of the herbaria mentioned in Methods and Content for their hospitality and aid during my visits, and to Patrick McLaren, Donald E. McAllister, and Fred N. Cowell for significant collecting efforts made in behalf of the survey. Finally, my deepest appreciation for the tireless efforts of fellow members of the various field parties, who were indispensable participants as field aids, divers, or helicopter pilots. They are Randy Felix, Phursumba Sherpa, John Boom, Douglas Kittle, Ron Long, Peter Newroth, Stephen van Haarten, Dean Peterson, and Robert W. T. O'Connor.

DIVISION CHLOROPHYTA
Class Chlorophyceae

Order Volvocales
Family Palmellaceae

Gloeocystis scopulorum Hansgirg
Collins 1908, p. 155; Taylor 1957, p. 37.
Eastern distribution.
Literature records.
Hudson Strait: Forbes Sound and False River Bay (Wilce 1959).

Order Chlorococcales
Family Characiaceae

Codiolum gregarium A. Braun
Kjellman 1877, p. 56, pl. 5, figs. 1-9, as *C. nordenskiöldianum;* 1883, p. 318, as *C. nordenskiöldianum;* Rosenvinge 1898, p. 118, as *C. nordenskiöldianum*; Jónsson 1903b, p. 338, fig. 2; Taylor 1957, p. 40; Scagel 1966, p. 105, pl. 7, figs, F-M, pl. 8, figs. A-E.
Collected at one locality where a few specimens were found among dense growths of *Urospora penicilliformis* and *Rosenvingiella polyrhiza* on intertidal bedrock. Rare. Most of the thalli could not be distinguished from *C. nordenskiöldianum* Kjellman, a species that Børgesen (1903) and, to a lesser extent, Kjellman (1883) and Jónsson (1903) had considered likely to be a form of *C. gregarium.* This alga has been linked with *Urospora mirabilis* in its life cycle (Jorde 1933).
Eastern distribution.
New records.
Hudson Strait: Negus Bay *2541.3.*

Codiolum pusillum (Lyngbye) Kjellman
Kjellman 1883, p. 318; Jónsson 1903b, p. 341, fig. 3; Taylor 1957, p. 41.
Eastern distribution.
Literature records.
Hudson Strait: False River Bay (Wilce 1959).

Family Endosphaeraceae

Chlorochytrium dermatocolax Reinke
Rosenvinge 1893, p. 964; Bristol 1920, p. 15, as *C. inclusum* var. *dermatocolax;* Waern 1952, p. 27; Lund 1959, p. 16.
Endophytic in *Sphacelaria arctica, Dictyosiphon foeniculaceus, Polysiphonia arctica, P. urceolata,* and *Rhodomela lycopodioides.* Occasional.
Eastern distribution.
Literature records.
Hudson Strait: Forbes Sound (Wilce 1959).
New records.
Foxe Channel: Stanley Harbour *74-255A-21.*
Hudson Bay: Rankin Inlet *74-253A-12.*
James Bay: Charlton Island *CANA 4208.*
Southwestern distribution.
New records.
Simpson Strait: Eta Island *8691.*
Queen Maud Gulf: Anderson Bay *8463,* Foggy Bay *8116.*
Dease Strait: Starvation Cove *7264.*
Dolphin and Union Strait: Bernard Harbour *6839.*
Amundsen Gulf: Sachs Harbour *4642.*
Northwestern distribution.
New records.
Barrow Strait: Allison Inlet *9360.*

Chlorochytrium inclusum Kjellman
Kjellman 1883, p. 320, pl. 31, figs. 8-17; Rosenvinge 1893, p. 963; 1898, p. 119; Jónsson 1903b, p. 337; Taylor 1957, p. 42; Lund 1959, p. 15; Scagel 1966, p. 103, pl. 9, fig. A.
Endophytic, usually in large numbers, in such fleshy red algae occurring as *Neodilsea integra, Turnerella pennyi,* and *Phyllophora truncata.* Less frequent hosts were *Phycodrys rubens, Halosaccion ramentaceum* and, in one instance, *Callophyllis cristata.* Frequent. Jónsson (1966) found this alga to be associated with *Spongomorpha lanosa (= S. aeruginosa)* in a single life cycle.
Eastern distribution.
Literature records.
Smith Sound: Rice Strait (Rosenvinge 1926).
Jones Sound: Craig Harbour (Lund 1933), Harbour Fjord (Rosenvinge 1926).
New records.
Hall Basin: Discovery Harbour *9673.*
Kane Basin: Copes Bay *9701,* northern Pim Island *9585, 9603.*
Jones Sound: Cape Skogn *9217,* near Cape Newman Smith *9243,* Boat Point *9172.*
Prince Regent Inlet: Creswell Bay *8868.*
Bellot Strait: Fox Islands *8821.*
Gulf of Boothia: Victoria Harbour *8775,* Netsiksiuvik Inlet *8737.*
Davis Strait: Frobisher Bay *CANA 16959.*
Repulse Bay: Talun Bay *74-255B-3.*

Southwestern distribution.
Literature records.
Dolphin and Union Strait: Cockburn Point (Collins 1927a, *CANA 4034).*
New records.
Simpson Strait: Eta Island *9026.*
Queen Maud Gulf: Royal Geographical Society Islands *8596*, Enterprise Point *7890,* Anderson Bay *8172*, Foggy Bay *8067*, near Minto Islands *7981.*
Dease Strait: Qikirtaarjuk Islands *6980,* Wellington Bay *62-7300-2.*
Dolphin and Union Strait: Cockburn Point *8567.*
Amundsen Gulf: Sachs Harbour *3360*, Gillet Bay *6812*, Police Point *4335, 6647.*
Northwestern distribution.
New records.
Penny Strait: near Russell Island *9745.*
Wellington Channel: Porden Point *9536.*
Barrow Strait: Assistance Bay *62-4001-2*, Allison Inlet *9367.*
McDougall Sound: Brooman Point *9256*, Freemans Cove *9309.*
Austin Channel: Hooker Bay *9341.*
Byam Channel: near Robertson Point *DH15-4.*
Viscount Melville Sound: near Little Point *DH2S9-11.*
Wilkens Strait, south of: Brock Island *3156.2.*
Beaufort Sea: Cape Prince Alfred *3074.2.*

Chlorochytrium schmitzii Rosenvinge
Rosenvinge 1893, p. 964, fig. 56; 1898, p. 119, fig. 25; Jónsson 1903b, p. 338, fig. 1; Taylor 1957, p. 43; Lund 1959, p. 15.
Endophytic in red and brown algal crusts. Occasional.
Eastern distribution.
Literature records.
Hudson Strait: Forbes Sound and False River Bay (Wilce 1959).
New records.
Hall Basin: Discovery Harbour *9673.*
Kane Basin: northern Pim Island *9605.*
Bellot Strait: near Brand Island *74-261A-6.*
Southwestern distribution.
New records.
Victoria Strait: Victory Point *8949.*
Queen Maud Gulf: Anderson Bay *8282.*
Dease Strait: near Duncan Island *7188.*
Dolphin and Union Strait: Bernard Harbour *6845.*
Amundsen Gulf: Booth Island *6596.*
Northwestern distribution.
Literature records.
Crozier Channel: Manson Point (Lee 1966).

Gomontia polyrhiza (Lagerheim) Bornet and Flahault
Rosenvinge 1893, p. 907; 1898, p. 101; Taylor 1957, p. 59, pl. 1, figs. 13-14, pl. 7, fig. 4; Lund 1959, p. 17; Scagel 1966, p. 108, pl. 10, figs. A-E.
On bivalve shells at depths between 3 and 20 m. Rare.
Eastern distribution.
Literature records.
Smith Sound: Rice Strait (Rosenvinge 1926).
Jones Sound: Harbour Fjord and Cape Vera (Rosenvinge 1926).
Fram Sound: Norfolk Inlet (Rosenvinge 1926).
Hudson Strait: Forbes Sound (Wilce 1959).
Southwestern distribution.
New records.
Queen Maud Gulf: Royal Geographical Society Islands *8600.*
Dease Strait: Qikirtaarjuk Islands *6976.*
Northwestern distribution.
New records.
Austin Channel: Hooker Bay *9337.*
Hecla and Griper Bay: Cape Fisher *3096.*

Family Phyllosiphonaceae

Ostreobium quekettii Bornet and Flahault
Rosenvinge 1893, p. 906; 1898, p. 101; Taylor 1957, p. 95, pl. 2, fig. 3; Lund 1959, p. 36.
On shells of bivalves and barnacles at a depth of 15 m at Harbour Fjord.
Eastern distribution.
Literature records.
Smith Sound: Rice Strait (Rosenvinge 1926).
Jones Sound: Harbour Fjord (Rosenvinge 1926).

Order Prasiolales
Family Prasiolaceae

Prasiola johanseni Collins
Collins 1927a, p. 7.
Southwestern distribution.
Literature records.

Dolphin and Union Strait: Bernard Harbour (Collins 1927a, *CANA 4083 Type*).

Rosenvingiella polyrhiza (Rosenvinge) Silva

Rosenvinge 1893, p. 937, figs. 45-46; 1898, p. 116; Waern 1952, p. 47, figs. 20a-e, 21, as *Gayella polyrhiza.*

Intertidal on bedrock formation. Growing densely in association with other filamentous green algae, such as *Urospora mirabilis, Rhizoclonium implexum, Ulothrix flacca,* and *U. pseudoflacca.* Rare. Both filamentous (*Schizogonium* stage) and multiseriate, cylindrical growth forms were present.

Eastern distribution.

New records.

Hudson Strait: Westbourne Bay *2536,* Negus Bay *2541.1.*

Order Ulotrichales
Family Ulotrichaceae

Ulothrix flacca (Dillwyn) Thuret

Rosenvinge 1893, p. 935, fig. 44; 1898, p. 115; Jónsson 1903b, p. 358; Taylor 1957, p. 45, pl. 1, fig. 9; Lund 1959, p. 18; Scagel 1966, p. 27, pl. 16, figs. C-H.

On intertidal rocks at Pangnirtung and Hudson Strait, on intertidal *Capsosiphon fulvescens* at Anderson Bay. Also at depths of 2-10 m in Hudson Strait, Ivugivik Harbour, and at Qikirtaarjuk Island on *Chaetomorpha melagonium* and *Laminaria* haptera. Rare.

Eastern distribution.

Literature records.

Jones Sound: "Borgo" (Rosenvinge 1926).

Cardigan Strait: Devil Island (Rosenvinge 1926).

Davis Strait: Cumberland Sound (Farlow) 1879, 1886), Pangnirtung (Wheldon 1947, also as *Ulothrix speciosa*, probably).

Hudson Strait: Forbes Sound (Wheldon 1947, also as *U. speciosa*, probably), Westbourne Bay, Negus Bay, Wakeham Bay, and Sugluk Inlet (Wheldon 1947).

New records.

Hudson Strait: Negus Bay *2595.1*, Wakeham Bay *2670.2.*

Hudson Bay: Ivugivik Harbour *2594.4.*

Southwestern distribution.

New records.

Queen Maud Gulf: Anderson Bay *8257.*

Dease Strait: Qikirtaarjuk Islands *7116.*

Ulothrix laetevirens (Hooker) Collins

Taylor 1959, p. 46; Scagel 1966, p. 29, pl. 16, figs K-M.

On intertidal rocks.

Eastern distribution.

Literature records.

Lancaster Sound: Dundas Harbour (Wheldon 1947).

Ulothrix pseudoflacca Wille

Rosenvinge 1893, p. 936, as *U. implexa;* Jónsson 1903b, p. 357; Waern 1952, p. 29; Taylor 1957, p. 46, as *U. implexa;* Lund 1959, p. 19.

At times intertidal on rocks and other algae (*Blidingia minima, Capsosiphon fulvescens, Pilayella littoralis, Stictyosiphon tortilis)* at scattered localities throughout its range of distribution. More commonly at the 0-30 m depth on rocks, hydroids, and a wide variety of other algae. Frequent.

Eastern distribution.

Literature records.

Lancaster Sound: Dundas Harbour (Wheldon 1947, as *Ulothrix implexa*).

New records.

Hall Basin: Discovery Harbour *9666.*

Kane Basin: northern Pim Island *9563.*

Jones Sound: Boat Point *9169.*

Prince Regent Inlet: Creswell Bay *8872.*

Bellot Strait: Fox Islands *8818.*

Eclipse Sound: near Pond Inlet *2707.*

Hudson Strait: Westbourne Bay *2484,* Wakeham Bay *2640.4.*

Hudson Bay: Ivugivik Harbour *2594.6.*

Southwestern distribution.

New records.

Rasmussen Basin: Peterson Bay *74-262D.*

Queen Maud Gulf: Enterprise Point *7910,* Anderson Bay *8222,* Foggy Bay *8054.*

Dease Strait: near Duncan Island *7205.*

Elu Inlet: unnamed island *8023.*

Melville Sound: Hurd Islands *8366.*

Prince of Wales Strait: Princess Royal Islands *9489.*

Amundsen Gulf: Sachs Harbour *3354.4,* Pearce Point *4434,* Gillet Bay *6787,* Police Point *4397, 6663.*

Beaufort Sea: near Tuktoyaktuk *3286.*

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966).

New records.

Lincoln Sea: Cape Hecla *9686.*

Wellington Channel: John Brown Point *9162*, Snowblind Bay *9145*.
McDougall Sound: Brooman Point *9264*.
Wilkins Strait, south of: Brock Island *3181*.
Crozier Channel: Mould Bay *3082*.

Ulothrix subflaccida Wille
Jónsson 1903b, p. 357; Waern 1952, p. 30; Lund 1959, p. 20.
Intertidal on *Blidingia minima* at Cape Jane Franklin, Anderson Bay, and Anchor Island. At other localities at depths of 2-10 m on *Chaetomorpha melagonium* and *Rhodemela lycopodioides*. Occasional.
Eastern distribution.
New records.
Hudson Strait: Wakeham Bay *2626.1*.
Southwestern distribution.
New records.
Victoria Strait: Cape Jane Franklin *8651*.
Queen Maud Gulf: Anderson Bay *8251*.
Dease Strait: Qikirtaarjuk Islands *7146*.
Coronation Gulf: Anchor Island *6912*.
Dolphin and Union Strait: Bernard Harbour *6862*.
Amundsen Gulf: Police Point *6662*.
Northwestern distribution.
Literature records.
Crozier Channel: Manson Point and Mould Bay (Lee 1966).

Order Ulvales
Family Capsosiphonaceae

Capsosiphon fulvescens (C. Agardh) Setchell and Gardner
Jónsson 1903b, p. 343, as *Enteromorpha aureola;* Waern 1952, p. 39; Taylor 1957, p. 69; Bliding 1963, p. 15, figs. 2-4.
The single population seen grew on intertidal pebbles that were submerged at the time in about 30 cm of water. Rivulets of freshwater flowed into the very small (about 40 cm^2) area of growth. It would appear that with a sufficient flow of freshwater the growth area would have been continually in water. Rare.
Southwestern distribution.
New records.
Queen Maud Gulf: Anderson Bay *8255*.

Family Percursariaceae

Percursaria percursa (C. Agardh) Rosenvinge
Kjellman 1883, p. 302, as *Diplonema percursum;* Rosenvinge 1893, p. 963; Waern 1952, p. 39; Taylor 1957, p. 61, pl. 1, fig. 8; Lund 1959, p. 22; Bliding 1963, p. 20, figs. 5-6; Scagel 1966, p. 63, pl. 17, fig. D.
Intertidal on rocks at Westbourne Bay. Also intertidal at Anderson Bay growing with *Capsosiphon fulvescens* on pebbles continuously immersed in water. Rare.
Eastern distribution.
Literature records.
Hudson Strait: False River Bay (Wilce 1959).
New records.
Hudson Strait: Westbourne Bay *2527*.
Southwestern distribution.
New records.
Queen Maud Gulf: Anderson Bay *8258*.

Family Monostromataceae

Blidingia marginata (J. Agardh) P. Dangeard subsp. ***marginata***
Kjellman 1883, p. 291, as *Enteromorpha micrococca* f. *typica;* Rosenvinge 1893, p. 957, fig. 54, as *E. intestinalis* f. *micrococca;* Bliding 1963, p. 32, figs. 12-13.
On intertidal rocks. Rare.
Eastern distribution.
Literature records.
Hudson Strait: Resolution Island (Taylor 1957, as *Enteromorpha marginata*), False River Bay (Wilce 1959, as *E. marginata*).
New records.
Hudson Strait: Sugluk Inlet *2606.2*

Blidingia marginata subsp. ***subsala*** (Kjellman) Bliding
Kjellman 1883, p. 292, pl. 31, figs. 1-3, as *Enteromorpha micrococca* f. *subsala*, in part; Bliding 1963, p. 37, figs. 14-15.
On intertidal rocks. Rare.
Eastern distribution.
New records.
Hudson Bay: Eskimo Point *74-250A-5*.

Blidingia minima var. ***minima***(Nägeli) Kylin
Kjellman 1883, p. 291, as *Enteromorpha minima*; Rosenvinge 1893, p. 959, as *E. intestinalis* var. *minima;* Waern 1952, p. 39; Bliding 1963, p. 23, fig. 7.
On intertidal bedrock. Rare.
Eastern distribution.
New records.
Hudson Strait: Westbourne Bay *2528*.

Blidingia minima var. ***ramifera*** Bliding
Kjellman 1883, p. 291, as *Enteromorpha*

micrococca f. *subsala*, in part; Bliding 1963, p. 27, figs. 8-9.

In warmer environments, on cobbles and pebbles from the intertidal region down to depths somewhere between 5 and 20 m in near freshwater (e.g., Kugmallit Bay was 1.0 0/00) to marine conditions. In colder regions, it was the only intertidal growth (sometimes with epiphytic *Ulothrix* species) in habitats uniquely arctic. In Victoria Strait and Wellington Channel, *Blidingia* occurred as extensive floating mats in brackish pools that were apparently above sea level. The seaward wall of the pools were pebble and cobble ridges formed by ice-push (*see* Lee 1973). The collection from near Alert, geographically in the very high arctic, was made in a "melt channel on sea ice surface". Occasional.

Eastern distribution.

Literature records.

Kane Basin: Alexandra Fjord (Rosenvinge 1926, as *Enteromorpha intestinalis; Simmons 1278* in Herb. Univ. Copenhagen).

Jones Sound: Harbour Fjord, Muskox Fjord, Goose Fjord, and West Fjord (Rosenvinge 1926, as *E. intestinalis; Simmons 2122, 2208,* and *2518* in Herb. Univ. Copenhagen).

Lancaster Sound: Dundas Harbour (Wheldon 1947, as *E. minima* and *E. micrococca*).

Hudson Strait: Westbourne Bay (Wheldon 1947, as *E. micrococca*).

New records.

Eclipse Sound: near Pond Inlet *2710.*

Gulf of Boothia: Netsiksiuvik Inlet *8714.*

Hudson Bay: Churchill *Coleman 171.3*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Bernard Harbour and Stapylton Bay (Collins 1927a, as *E. micrococca, CANA 4046* and *4056*).

New records.

Victoria Strait: near Cape Jane Franklin *8650,* Franklin Point *8648.*

Queen Maud Gulf: Anderson Bay *8250.*

Coronation Gulf: Anchor Island *6904.*

Amundsen Gulf: De Salis Bay *4571,* Cape Kellett *CANA 9202,* Pearce Point *4498.*

Kugmallit Bay: near Tuktoyaktuk Harbour *3285.*

Northwestern distribution.

New records.

Lincoln Sea: near Alert *Harington 212.*

Wellington Channel: John Brown Point *9161.*

Kornmannia leptoderma (Kjellman) Bliding

Kjellman 1883, p. 299, as *Monostroma leptodermum;* Rosenvinge 1893, p. 944, fig. 49, as *M. leptodermum*; 1898, p. 117, as *M. leptodermum;* Taylor 1957, p. 71, as *M. leptodermum;* Lund 1959, p. 21, as *M. leptodermum;* Bliding 1968, p. 611, figs. 44-46.

Eastern distribution.

Literature records.

Hudson Strait: Port Harvey and Forbes Sound (Wilce 1959).

Monostroma arcticum Wittrock

Kjellman 1883, p. 299; Rosenvinge 1893, p. 949, fig. 51, as *M. grevillei* var. *arctica*; 1898, p. 117 as *M. grevillei* var. *arctica*; Lund 1959, p. 22, as *M. grevillei* f. *arctica*; Jaasund 1965, p. 20; Scagel 1966, p. 35, pl. 18, fig. F, pl. 19, fig. B; Bliding 1968, p. 606, figs. 42-43.

On rocks at the 7-8 m depth. Rare.

Eastern distribution.

Literature records.

Jones Sound: "Jammer Bay" or Bay of Woe (Rosenvinge 1926, as *Monostroma grevillei*).

New records.

Kane Basin: northern Pim Island *9568.*

Family Ulvaceae

Enteromorpha clathrata (Roth) Greville

Kjellman 1883, p. 287; Jónsson 1903b, p. 348; Waern 1952, p. 37, fig. 17a; Taylor 1957, p. 63, pl. 3, fig. 1; Lund 1959, p. 24; Bliding 1963, p. 107, figs. 64-69; Scagel 1966, p. 46, pl. 22, figs. E, F, pl. 23, figs. A-B.

Eastern distribution.

Literature records.

Robeson Channel: Cape Sheridan (Dickie 1878).

Kane Basin: Hayes Fjord (Dickie 1878).

Davis Strait: Cumberland Sound (Dickie 1878).

Enteromorpha compressa (Linnaeus) Greville

Kjellman 1883, p. 289, in part; Rosenvinge 1893, p. 958, as *E. intestinalis* var. *compressa;* 1898, p. 117, as *E. intestinalis* var. *compressa*; Jónsson 1903b, p. 346, as *E. intestinalis* var. *compressa;* Waern 1952, p. 35, fig. 14b; Taylor 1957, p. 64, pl. 3, fig. 3; Lund 1959, p. 23; Bliding 1963, p. 132, figs.

82-84; Scagel 1966, p. 47, pl. 23, figs. C-F.

On intertidal rocks, in gregarious populations at the Hudson Strait sites. All of the northwestern literature records were based on drift material. Rare.

Eastern distribution.

Literature records.

Smith Sound: 78-82° N (Ashmead 1864).

Bellot Strait: Port Kennedy (Dickie 1861, as questionable).

Davis Strait: Cumberland Sound (Dickie 1867).

Hudson Strait: Forbes Sound (Wilce 1959).

Hudson Bay: Hudson Bay (Bell and MacFarlane 1933).

New records.

Hudson Strait: Negus Bay *2543,* Sugluk Inlet *2606.1.*

Hudson Bay: Great Whale River *Savile 691.*

Northwestern distribution.

Literature records.

Wellington Channel: Baring Bay (Dickie 1852).

Barrow Strait: Beechey Island and Assistance Bay (Dickie 1852).

Enteromorpha crinita (Roth) J. Agardh

Bliding 1963, p. 119, figs. 73-78, as *E. ramulosa;* Scagel 1966, p. 48, pl. 25, figs. A-E.

Eastern distribution.

Literature records.

Adams Sound: Arctic Bay (Wheldon 1947, as *Enteromorpha ramulosa*).

Hudson Strait: Forbes Sound and Negus Bay (Wheldon 1947, as *E. ramulosa*).

James Bay: James Bay (Setchell and Collins 1908).

Enteromorpha flexuosa subsp. ***paradoxa*** (Dillwyn) Bliding

Taylor 1957, p. 63, as *E. plumosa*; Bliding 1963, p. 79, figs. 42-45.

Intertidal at Ekwan River and subtidal at the 5-6 m depth at Charlton Island. Rare.

Eastern distribution.

Literature records.

Hudson Strait: Forbes Sound and False River Bay (Wilce 1959, as *Enteromorpha erecta* and *E. plumosa*, respectively).

James Bay: Charlton Island (Howe 1927, as *E. plumosa, CANA 4235*).

New records.

Hudson Bay: Fort Churchill *Crum 7617.*

James Bay: Ekwan River *CANA 9001.*

Enteromorpha groenlandica (J. Agardh) Setchell and Gardner

Rosenvinge 1893, p. 954, fig. 53, as *Monostroma groenlandicum;* 1898, p. 117; Taylor 1957, p. 69; Lund 1959, p. 24.

Eastern distribution.

Literature records.

Hudson Bay: Hudson Bay (Taylor 1957).

Enteromorpha intestinalis (Linnaeus) Link

Kjellman 1883, p. 287; Rosenvinge 1893, p. 957, as *E. intestinalis* var. *genuina;* Jónsson 1903b, p. 344, as *E. intestinalis* var. *genuina;* Waern 1952, p. 32, fig. 14a; Taylor 1957, p. 66, pl. 3, fig. 7, pl. 4, figs. 4-5; Lund 1959, p. 22; Bliding 1963, p. 139, figs. 87-88; Scagel 1966, p. 49, pl. 26, figs. A-Q, pl. 27, figs. A-E, pl. 28, figs. C-D.

On intertidal boulders at Ekwan River. Rare.

Eastern distribution.

*Literature records.**

Baffin Bay: Cape Bowen (Dickie 1853).

Davis Strait: Cumberland Sound (Dickie 1867, Bell and MacFarlane 1938, Wheldon 1947).

Hudson Strait: Forbes Sound and False River Bay (Wilce 1959).

Hudson Bay: Chesterfield Inlet (Wheldon 1947), Churchill (Bell and MacFarlane 1938).

James Bay: James Bay (Setchell and Collins 1908, Bell and MacFarlane 1938).

New records.

James Bay: Ekwan River *CANA 9003.*

Enteromorpha linza (Linnaeus) J. Agardh

Taylor 1957, p. 68, pl. 3, fig. 8; Bliding 1963, p. 127, figs. 79-81; Scagel 1966, p. 52, pl. 24, figs. A-F.

Eastern distribution.

Literature records.

Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938).

Enteromorpha prolifera (O. F. Müller) J. Agardh

Kjellman 1883, p. 289, as *E. compressa* f. *prolifera;* Rosenvinge 1893, p. 960, in part; Jónsson 1903b, p. 347, as *E. intestinalis* f. *prolifera;* Waern 1952, p. 35, fig. 16g-h; Taylor 1957, p. 65, pl. 3, fig. 2; Lund 1959, p. 23;

* The specimens from Jones Sound and Kane Basin that Rosenvinge (1926) referred to as *Enteromorpha intestinalis* are of *Blidingia minima* var. *ramifera.*

Bliding 1963, p. 45, figs. 19-28a; Scagel 1966, p. 54, pl. 28, figs. E-G, in part.

On intertidal boulders and free-floating at Ekwan River, and on pebbles within the 5 and 20 m depth in De Salis Bay. Rare. The Fox Islands and Ekwan River specimens are similar to 'Typus I', those from De Salis Bay most closely resemble "Typus III", according to Bliding's (1963) circumscription of *E. prolifera* subsp. *prolifera*.

Eastern distribution.

Literature records.

Lancaster Sound: Dundas Harbour (Wheldon 1947).

Davis Strait: Pangnirtung (Wheldon 1947).

Hudson Bay: Southampton Island (Bell and MacFarlane 1938).

James Bay: Charlton Island (Howe 1927, *CANA* 4236; Bell and MacFarlane 1938).

New records.

Bellot Strait: Fox Islands *8836.*

James Bay: Ekwan River *CANA 9005.*

Southwestern distribution.

New records.

Amundsen Gulf: De Salis Bay *4570.*

Northwestern distribution.

Literature records.

Crozier Channel: Mould Bay (Lee 1966).

Ulva lactuca Linnaeus

Kjellman 1883, p. 293, also as *U. crassa*; Rosenvinge 1893, p. 939; 1898, p. 116; Taylor 1957, p. 74, pl. 4, fig. 6, in part; Scagel 1966, p. 60, pl. 31, figs. I-K; Bliding 1968, p. 540, figs. 1-5.

At Cape Prince Alfred, at depths of 5-10 m loose-lying on the mud substrate. At Chesterfield Inlet, the specimens were collected as shore-drift. Rare.

Eastern distibution.

Literature records.

Smith Sound: 78-82° N (Ashmead 1864, as *Ulva latissima*).

Davis Strait: Cumberland Sound (Dickie 1867, as *U. latissima*).

Hudson Strait: Westbourne Bay (Bell and MacFarlane 1938).

James Bay: James Bay (Setchell and Collins 1908).

New records.

Hudson Bay: Chesterfield Inlet *Savile and Watts 838.*

Northwestern distribution.

Literature records.

Lincoln Sea: Mushroom Point (Dickie 1878, as *U. latissima*).

Queens Channel: Queens Channel (Harvey 1858).

New records.

Beaufort Sea: Cape Prince Alfred *3071.*

Ulva rigida C. Agardh

Taylor 1957, p. 74, as *U. lactuca* var. *rigida;* Scagel 1966, p. 61, pl. 30, figs. A-C, pl. 31, figs. A-H; Bliding 1968, p. 546, figs. 6-10.

At Gillet Bay, on cobbles at the 3-5 m depth. Rare.

Eastern distribution.

Literature records.

Hudson Strait: Port Harvey and Forbes Sound (Wilce 1959, as *Ulva lactuca* var. *rigida*).

Hudson Bay: Hudson Bay (Bell and MacFarlane 1933, as *U. lactuca* var. *rigida.*

Southwestern distribution.

New records.

Amundsen Gulf: Gillet Bay *6741.*

Ulvaria obscura var. ***blyttii*** (Areschoug) Bliding

Kjellman 1883, p. 299, as *Monostroma fuscum* and *M. blyttii;* Rosenvinge 1893, p. 940, fig. 47, as *M. fuscum;* 1898, p. 116, as *M. fuscum*; Taylor 1957, p. 70, as *M. fuscum* f. *blyttii;* Lund 1959, p. 21, as *M. fuscum;* Scagel 1966, p. 36, pl. 19, figs. C-E, pl. 20, figs. A-B, pl. 21, fig. A, as *M. fuscum;* Bliding 1968, p. 574, figs. 27-30.

At depths of 2-18 m on rocks. Occasional.

Eastern distribution.

Literature records.

Smith Sound: Pim Island (Rosenvinge 1926, as *Monostroma fuscum).*

Jones Sound: Craig Harbour (Lund 1933, as *M. fuscum*).

Davis Strait: Pangnirtung (Wheldon 1947, as *M. fuscum*).

Hudson Strait: Ungava Bay (Farlow 1886, as *M. blyttii*); Forbes Sound, False River Bay, and Koksoak River (Wilce 1959, as *M. fuscum* var. *blyttii*).

New records.

Kane Basin: northern Pim Island *9584, 9613.*

Fram Sound: Rodberg Bay *9184.*

Bellot Strait: Fox Islands *8828,* near Brands Island *74-261-9.*

Gulf of Boothia: Netsiksiuvik Inlet *8746.*

Eclipse Sound: near Pond Inlet *2678.*

Southwestern distribution.

New records.

Dolphin and Union Strait: Cockburn Point *8543.*
Amundsen Gulf: Police Point *6644.*
Northwestern distribution.
New records.
Penny Strait: near Russell Island *9746.*
Queens Channel: near Cape Becher *9760.*
McDougall Sound: Templeton Bay *9114.*

Ulvaria oxysperma (Kützing) Bliding
Taylor 1957, p. 72, pl. 4, figs. 1-3, as *Monostroma oxyspermum;* Scagel 1966, p. 39, pl. 20, fig. C, pl. 21, fig. B, as *M. oxyspermum;* Bliding 1968, p. 585, figs. 31-36.
"Washed ashore or in the intertidal zone".
Eastern distribution.
New records.
Hudson Bay: Churchill *Crum 7669.*

Order Chaetophorales
Family Chaetophoraceae

Acrochaeta repens Pringsheim
Waern 1952, p. 58; Taylor 1957, p. 52; South 1974, p. 907, fig. 2.
At the 2-9 m depth endophytic in the upper part of thalli of *Chorda filum* and *C. tomentosa.* Rare.
Southwestern distribution.
New records.
Simpson Strait: Eta Island *9016.*
Melville Sound: Kuururjuak Point *8385,* Hurd Islands *8322.*
Bathurst Inlet: Cape Croker *8486,* Buchan Bay *8535.*

Arthrochaete penetrans Rosenvinge
Rosenvinge 1898, p. 111, fig. 24; 1910, p. 127, fig. 9, also as *A. phaeophila*; Lund 1959, p. 26.
Within the 2 and 20 m depth on various other algae: *Chaetomorpha melagonium, Stictyosiphon tortilis, Desmarestia aculeata, Punctaria glacialis, Omphalophyllum ulvaceum, Fucus distichus, Neodilsea integra, Phyllophora truncata, Phycodrys rubens,* and *Polysiphonia arctica.* Frequent.
Eastern distribution.
New records.
Adams Sound: Arctic Bay *2716.*
Prince Regent Inlet: Creswell Bay *8880.*
Eclipse Sound: near Pond Inlet *2688.*
Hudson Strait: Wakeham Bay *2640.3.*
Fox Channel: Stanley Harbour *74-255A-26.*
Hudson Bay: Munn Bay *74-254-8,* Rankin Inlet *74-253A-4.*
Southern distribution.
New records.
Queen Maud Gulf: Enterprise Point *7930,* Anderson Bay *8442*, Foggy Bay *8081*, near Minto Islands *7979.*
Elu Inlet: unnamed island *8049.*
Dolphin and Union Strait: Bernard Harbour *6859.*
Amundsen Gulf: De Salis Bay *4560,* Gillet Bay *6813.*
Northwestern distribution.
New records.
Barrow Strait: Cunningham Inlet *9764,* Allison Inlet *9369.*
McDougall Sound: Templeton Bay *9118*, Brooman Point *9263.*
Austin Channel: Hooker Bay *9339.*
Wilkens Strait, south of: Brock Island *3171.2*
Beaufort Sea: Cape Prince Alfred *3073.3.*

Bolbocoleon piliferum Pringsheim
Kjellman 1883, p. 316; Huber 1892, p. 308, pl. 13, figs. 8-12; Rosenvinge 1893, p. 934; Waern 1952, p. 59; Taylor 1957, p. 52; Lund 1959, p. 25; South 1974, p. 908, fig. 3.
Endophytic in various brown algae at the 3-20 m depth, except at Westbourne Bay where it was intertidal (on *Stictyosiphon tortilis*). In the southwestern region the most common host was *Stictyosiphon tortilis,* followed by *Dictyosiphon foeniculaceus, Punctaria glacialis, Chordaria flagelliformis, Sphacelaria arctica, Chorda filum,* and *C. tomentosa.* Occasional.
Eastern distribution.
New records.
Hudson Strait: Westbourne Bay *2530.2.*
Hudson Bay: Rankin Inlet *74-252A-9.*
Southwestern distribution.
New records.
St. Roch Basin: Peel Inlet *8984.*
Simpson Strait: Eta Island *8698, 9030.*
Queen Maud Gulf: Royal Geographical Society Islands *8615,* Enterprise Point *7932,* Anderson Bay *8190, 8474,* Foggy Bay *8099*, near Minto Islands *8008.*
Dease Strait: Starvation Cove *7270*, Qikirtaarjuk Islands *7140,* near Duncan Island *7181.*
Elu Inlet: unnamed island *8052.*
Melville Sound: Kuururjuak Point *8386,* Hurd Islands *8367.*
Bathurst Inlet: Cape Croker *8489* Buchan Bay *8541.*

Coronation Gulf: Anchor Island *6929.*
Dolphin and Union Strait: Bernard Harbour *6867.*
Amundsen Gulf: De Salis Bay *4554,* Gillet Bay *6790,* Police Point *4254,* Booth Island *6572.*

Chaetobolus gibbus Rosenvinge

Rosenvinge 1893, p. 928, fig. 41; 1898, p. 110; Lund 1959, p. 27.

Epiphytic on a variety of algae at depths of 2-15 m. The most common host was *Sorapion kjellmanii*; others were *Hildenbrandia prototypus, Pseudolithoderma extensum, Punctaria glacialis, Sphacelaria arctica, Desmotrichum undulatum, Chaetomorpha melagonium,* and *Cladophora.* Occasional. Known only from the Canadian Arctic, Greenland, and perhaps, according to Lund (1959), one locality in Denmark, this alga is polystromatic and when unhindered by surrounding host cells has a definite hemispherical habit. It is at least morphologically distinct from the unevenly spreading monostromatic discs of *Ochlochaete.* However, Waern (1952) refers to *O. gibbus*, as he considers the difference in form to be insufficient for maintaining *Chaetobolus*. In my opinion, the marked difference in growth habit and probable contrasting mode of development are adequate distinctions at present for recognizing the two genera.

Southwestern distribution.

New records.

Simpson Strait: Eta Island *9034.*
Queen Maud Gulf: Enterprise Point *7914,* Anderson Bay *8236, 8454,* Foggy Bay *8137,* near Minto Islands *7993.*
Dease Strait: near Duncan Island *7215.*
Elu Inlet: unnamed island *8044.*
Melville Sound: Hurd Islands *8375.*
Bathurst Inlet: Cape Croker *8498,* Buchan Bay *8524.*
Coronation Gulf: Anchor Island *6942.*
Amundsen Gulf: Pearce Point *4516.*

Ectochaete leptochaete (Huber) Wille

Huber 1893, p. 319, pl. 15, figs. 1-9, as *Endoderma leptochaete;* Waern 1952, p. 55.

Within the 1 and 25 m depth usually on *Chaetomorpha melagonium.* Other hosts were *Hildenbrandia prototypus, Polysiphonia arctica,* and *Rhodomela lycopodioides.* Occasional in the southwest.

Eastern distribution.

New records.

Prince Regent Inlet: Creswell Bay *8882.*
Gulf of Boothia: Netsiksiuvik Inlet *8741.*

Southwestern distribution.

New records.

Queen Maud Gulf: Enterprise Point *7907,* Anderson Bay *8225, 8466,* Foggy Bay *8110,* near Minto Islands *8004.*
Dease Strait: Starvation Cove *7281,* Qikirtaarjuk Islands *7149.*
Elu Inlet: unnamed island *8040.*
Dolphin and Union Strait: Bernard Harbour *6871.*
Amundsen Gulf: De Salis Bay *4550,* Sachs Harbour *3362.*

Ectochaete wittrockii (Wille) Kylin

Huber 1892, p. 326, as *Endoderma wittrockii;* Rosenvinge 1893, p. 934, as *E. wittrockii;* Taylor 1957, p. 54, as *Entocladia wittrockii;* South 1974, p. 910, fig. 4.

Epiphytic or endophytic in cell walls of *Chaetomorpha melagonium, Fucus distichus, Rhodymenia palmata,* and *Rhodomela lycopodioides* at depths of 1-15 m.

Southwestern distribution.

New records.

Simpson Strait: Eta Island *8671.*
Rasmussen Basin: Peterson Bay *74-262B-9.*
Dease Strait: near Duncan Island *7192.*
Elu Inlet: unnamed island *8412.*

Entocladia viridis Reinke

Waern 1952, p. 56; Taylor 1957, p. 54, pl. 2, figs. 1-2; Scagel 1966, p. 30, pl. 17, fig. C; South 1974, p. 913, fig. 7.

At the 2-35 m depth endophytic in various other algae, most commonly *Chaetomorpha melagonium* and *Phyllophora truncata.* Others included *Punctaria glacialis, Neodilsea integra, Turnerella pennyi,* and *Polysiphonia arctica.* Frequent.

Eastern distribution.

New records.

Kane Basin: Copes Bay *9700,* northern Pim Island *9609.*
Jones Sound: Boat Point *9171.*
Prince Regent Inlet: Creswell Bay *8881.*
Gulf of Boothia: Victoria Harbour *8791.*
Davis Strait: Frobisher Bay *CANA 16960.*
Hudson Bay: Eskimo Point *74-250-15.*

Southwestern distribution.

New records.

St. Roch Basin: Peel Inlet *8974.*
Rasmussen Basin: Peterson Bay *74-262-2.*
Simpson Strait: Eta Island *8997.*
Queen Maud Gulf: Royal Geographical

Society Islands *8612,* Enterprise Point *7922,* Anderson Bay *8173, 8418* Foggy Bay *8063,* near Minto Islands *7986.*
Dease Strait: Qikirtaarjuk Islands *7099,* Wellington Bay *62-7305-1.*
Coronation Gulf: Anchor Island *6916.*
Dolphin and Union Strait: Bernard Harbour *6857.*
Amundsen Gulf: Sachs Harbour *3339.2.* Pearce Point *4466,* Gillet Bay *6810,* Police Point *6715.*
Northwestern distribution.
Literature records.
Crozier Channel: Mould Bay (Lee 1966).
New records.
Queens Channel: Milne Island *9103.*
Barrow Strait: Allison Inlet *9363.*
McDougall Sound: Templeton Bay *9107,* Brooman Point *9252,* Freemans Cove *9311.*
Austin Channel: Hooker Bay *9340.*
Byam Channel: near Robertson Point *DH7-5, DH22-4.*
Viscount Melville Sound: near Little Point *DH2S9-10.*
Wilkins Strait, south of: Brock Island *3156.4.*
Kellett Strait: near Pedder Point *3088.4.*
Crozier Channel: Manson Point *3136.*

Epicladia flustrae Reinke

Rosenvinge 1898, p. 115; Waern 1952, p. 58; Taylor 1957, p. 55, as *Entocladia flustrae;* Lund 1959, p. 25; South 1974, p. 914, fig. 8.

On hydroids (*Eudendrium, Obelia,* and *Abietinaria*), and bryozoans (*Eucrata*). In the intertidal zone at Rankin Inlet, at the 3-20 m depth elsewhere. Occasional.
Eastern distribution.
New records.
Bellot Strait: Fox Islands *8844.*
Hudson Strait: Negus Bay *2572.*
Hudson Bay: Rankin Inlet *74-253A-21.*
Southwestern distribution.
New records.
Dease Strait: Qikirtaarjuk Islands *7153.*
Coronation Gulf: Anchor Island *6992.*
Amundsen Gulf: Prince Albert Sound *9469,* De Salis Bay *4576,* Sachs Harbour *3343,* Gillet Bay *6771.*
Northwestern distribution.
New records.
Viscount Melville Sound: near Little Point *DH2S7-7.*

Pringsheimiella scutata (Reinke) Marchewianka

Rosenvinge 1893, p. 924, as *Pringsheimia scutata;* Waern 1952, p. 62; Taylor 1957, p. 57; Lund 1959, p. 28; South 1974, p. 916, fig. 11.

The Anchor Island specimens occurred on *Polysiphonia arctica* from an unrecorded depth. Rare.
Eastern distribution.
Literature records.
Hudson Strait: Ungava Bay (Wilce 1959).
Southwestern distribution.
New records.
Coronation Gulf: Anchor Island *6918.*

Pseudendoclonium submarinum Wille

Waern 1952, p. 49; Taylor 1957, p. 55, also as *Protoderma marinum;* Lund 1959, p. 26; South 1974, p. 918, fig. 12.

Intertidal (Netsiksiuvik Inlet, Peel Inlet, Elu Inlet) and at the 2-20 m depth. When intertidal usually with *Calothrix scopulorum,* when subtidal on rocks, stipes of *Laminaria,* and on molluscan shells. Occasional.
Eastern distribution.
New records.
Hall Basin: Discovery Harbour *9674.*
Gulf of Boothia: Netsiksiuvik Inlet *8713.*
Southwestern distribution.
New records.
St. Roch Basin: Peel Inlet *8964.*
Queen Maud Gulf: Royal Geographical Society Islands *8603.*
Dease Strait: near Duncan Island *7189.*
Elu Inlet: unnamed island *8024.*
Northwestern distribution.
Literature records.
Crozier Channel: Mould Bay (Lee 1966).
New records.
Nanson Sound: Cape St. Andrew *9545.*
Wellington Channel: Emery Bay *9128.*
Austin Channel: Hooker Bay *9336.*
Byam Channel: near Robertson Point *DH15-11, DH22-6,* near Kay Point *DH5-1.*
Viscount Melville Sound: near Little Point *DH2S2-2.*
Wilkins Strait, south of: Brock Island *3172.2.*
M'Clure Strait: Cape Mecham *3150.*

Pseudopringsheimia confluens (Rosenvinge) Wille

Rosenvinge 1893, p. 924, fig. 39, as *Ulvella confluens*; 1898, p. 109, as *U. confluens;* Lund 1959, p. 29; South 1974, p. 919, fig. 13A.

On the stipes and blades of *Laminaria groenlandica* and *L. solidungula* at depths between 6 and 20 m. Rare.
Northwestern distribution.

New records.
Penny Strait: near Russell Island *9734.*
Queens Channel: near Cape Becher *9749.*
McDougall Sound: Freemans Cove *9300.*
Austin Channel: Hooker Bay *9335.*

Pseudopringsheimia fucicola (Rosenvinge) Wille

Rosenvinge 1893, p. 926, fig. 40, as *Ulvella fucicola;* 1898, p. 109, as *U. fucicola;* Waern 1952, p. 62; Lund 1959, p. 29; South 1974, p. 920, fig. 13B.

Epiphytic on *Fucus distichus* in the intertidal zone (northern Pim Island) and at the 1-3 m depth. Rare.

Eastern distribution.
New records.
Kane Basin: Copes Bay *9691,* northern Pim Island *9560.*
Northwestern distribution.
New records.
Barrow Strait: Cunningham Inlet *9765.*

Family Chroolepidaceae

Pilinia endophytica Collins

Collins 1908, p. 156; Taylor 1957, p. 50.

At the 2-9 m depth in the crustaceous thalli of *Ralfsia clavata, Sorapion kjellmanii, Lithoderma fasticens,* and *Pseudolithoderma extensum.* Occasional.

Eastern distribution.
New records.
Bellot Strait: near Brands Island *74-261A-5.*
Southwestern distribution.
New records.
Victoria Strait: Victory Point *8954.*
Queen Maud Gulf: Enterprise Point *7915,* Anderson Bay *8214, 8453,* near Minto Islands *7994.*
Dease Strait: Qikirtaarjuk Islands *6979,* near Duncan Island *7214.*
Melville Sound: Hurd Islands *8318.*
Amundsen Gulf: Prince Albert Sound *9461,* Pearce Point *4512.*

Order Acrosiphonales
Family Acrosiphonaceae

Urospora mirabilis Areschoug

Kjellman 1883, p. 315, as *U. penicilliformis;* Rosenvinge 1893, p. 918, fig. 35; 1898, p. 106; Waern 1952, p. 64, as *U. penicilliformis;* Taylor 1957, p. 77, as *U. penicilliformis;* Lund 1959, p. 30, as *U. penicilliformis;* Scagel 1966, p. 78, pl. 36, figs. A-D.

On intertidal rocks, *Blidingia minima,* and *Pilayella littoralis.* Rare. Jorde (1933) has linked this alga with *Codiolum gregarum* in the same life cycle.

Eastern distribution.
Literature records.
Baffin Bay: Clyde (Wheldon 1947, as *Hormiscia penicilliformis*).
Hudson Strait: Koksoak River (Wilce 1959, as *Urospora penicilliformis*).
New records.
Hudson Strait: Westbourne Bay *2529,* Negus Bay *2541.2.*
Southwestern distribution.
New records.
Rasmussen Basin: Peterson Bay *74-262D.*
Northwestern distribution.
New records.
Wellington Channel: Snowblind Bay *9143.*

Urospora wormskjoldii (Mertens) Rosenvinge

Kjellman 1883, p. 313, as *Chaetomorpha wormskioldii;* Rosenvinge 1893, p. 920, figs. 36-37; 1898, p. 106; Taylor 1957, p. 77, also as *U. collabens;* Scagel 1966, p. 81, pl. 35, figs. G-H, pl. 36, figs. E-I.

At Ivugivik Harbour, epiphytic on the stipe of *Laminaria longicruris* at the 3-10 m depth; near Lands End, on cobbles and pebbles at the 4-6 m depth. Rare.

Eastern distribution.
Literature records.
Fram Sound: Norfolk Inlet (Rosenvinge 1926).
New records.
Hudson Bay: Ivugivik Harbour *2591.2.*
Northwestern distribution.
New records.
Norwegian Bay: near Lands End *9537.*

Acrosiphonia arcta (Dillwyn) J. Agardh

Kjellman 1883, p. 304, as *Spongomorpha arcta;* Taylor 1957, p. 90, pl. 6, figs. 5-6, as *S. arcta*; Scagel 1966, pl. 37, figs. A-D, pl. 38, fig. A, as *S. arcta.*

On intertidal and subtidal rocks in Hudson Strait and Hudson Bay. In other areas at depths of 3-25 m on rocks and invertebrates. Occasional.

Eastern distribution.
Literature records.
Smith Sound: 78-82° N (Ashmead 1864, as *Cladophora arcta*).
Davis Strait: Cumberland Sound (Dickie 1867; Farlow 1879, 1886; all as *C. arcta*).

Hudson Strait: Ungava Bay (Farlow 1886, as *C. arcta*), Forbes Sound (Wheldon 1947, as *C. arcta;* Wilce 1959, as *Spongomorpha arcta*), Hudson Strait (Bell and MacFarlane 1933, as *S. arcta*).

New records.

Kane Basin: northern Pim Island *9564, 9581.*

Eclipse Sound: near Pond Inlet *2692.*

Hudson Strait: Westbourne Bay *2520,* Negus Bay *2553.1.*

Foxe Channel: Stanley Harbour *74-255A-17.*

Hudson Bay: Churchill *Crum 7668.*

Southwestern distribution.

New records.

Amundsen Gulf: Thesiger Bay *3379.*

Northwestern distribution.

Literature records.

Crozier Channel: Mould Bay (Lee 1966).

New records.

Penny Strait: near Russell Island *9747,* Hungry Bay *62-4300.*

Queens Channel: Milne Island *9095.*

Wellington Channel: Snowblind Bay *9157.*

Acrosiphonia hystrix (Strömfelt) Jónsson

Rosenvinge 1893, p. 907, as *Cladophora arcta* var. *hystrix;* Jónsson 1903b, p. 368, figs. 13-14; Taylor 1959, p. 90, as *Spongomorpha hystrix.*

Intertidal at Pangnirtung, the southernmost record; elsewhere at depths of 3-18 m. On rocks. Rare.

Eastern distribution.

Literature records.

Smith Sound: Rice Strait (Rosenvinge 1926).

Jones Sound: "Jammer Bay" or Bay of Woe, and Cape Vera (Rosenvinge 1926).

Fram Sound: Norfolk Inlet (Rosenvinge 1926).

Cardigan Strait: Devil Island (Rosenvinge 1926).

Davis Strait: Pangnirtung (Wheldon 1947, as *Cladophora hystrix*).

New records.

Fram Sound: Rodberg Bay *9187.*

Bellot Strait: Fox Islands *8846.*

Northwestern distribution.

New records.

Norwegian Bay: near Lands End *9538.*

Spongomorpha aeruginosa (Linnaeus) Hoek

Kjellman 1883, p. 306, as *S. lanosa;* Taylor 1957, p. 89, pl. 5, figs. 6-7, as *S. lanosa;* van den Hoek 1963, p. 225.

This is a gametophyte stage in a life cycle with *Chlorochytrium inclusum* according to Jónsson (1966).

Eastern distribution.

Literature records.

Davis Strait: Cumberland Sound (Dickie 1867, as *Cladophora lanosa*).

Hudson Strait: Forbes Sound (Wilce 1959, as *Spongomorpha lanosa*).

Order Cladophorales
Family Cladophoraceae

Rhizoclonium riparium (Roth) Harvey

Kjellman 1883, p. 309, also as *R. rigidum;* Rosenvinge 1893, p. 915, figs. 32-34; 1898, p. 103; Waern 1952, p. 71; Taylor 1957, p. 80, pl. 1, fig. 3, also as *R. kerneri* and *R. tortuosum;* Lund 1959, p. 33; Scagel 1966, pl. 32, figs. A-E, pl. 33, figs. A-B, also as *R. implexum.*

Intertidal, on bedrock at Negus Bay, cobbles and pebbles elsewhere. At Anderson Bay, a few filaments of *R. riparium* var. *riparium* and *R. riparium* var. *polyrhizum* (Lyngbye) Rosenvinge occurred in a freshwater inundated green algal community dominated by *Capsosiphon fulvescens.* The Westbourne Bay specimens were of var. *riparium*; those of Negus Bay, var. *implexum* (Dillwyn) Rosenvinge. Rare.

Eastern distribution.

Literature records.

Davis Strait: Cumberland Sound (Dickie 1867), Pangnirtung (Wheldon 1947).

Hudson Strait: Forbes Sound (Wheldon 1947, Wilce 1959), Koksoak River (Wilce 1959).

New records.

Hudson Strait: Westbourne Bay *2528.7,* Negus Bay *2595.2.*

Hudson Bay: Churchill *Coleman 171.2.*

Southwestern distribution.

New records.

Queen Maud Gulf: Anderson Bay *8260.*

Chaetomorpha linum (O. F. Müller) Kützing

Kjellman 1883, p. 313; Waern 1952, p. 69, fig. 30; Taylor 1959, p. 78, pl. 1, figs. 1-2, 10-12, also as *C. aerea.*

Subtidal, attached to worm casings and loose-lying.

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966).

Chaetomorpha melagonium (Weber and Mohr) Kützing

Kjellman 1883, p. 311, also as *C. tortuosa**; *Rosenvinge 1893, p. 917, also as C. tortuosa;* 1898, p. 104, also as *C. tortuosa;* Waern 1952, p. 66, fig. 28; Taylor 1957, p. 80; Lund 1959, p. 31.

Subtidal to the 25 m depth attached to rocks or loose-lying. Also intertidal in Hudson Strait and Hudson Bay. Usually present as loose-lying, dense populations on the mud substrates of the colder northwest region. Frequent.

Eastern distribution.

Literature records.

Hall Basin: Discovery Harbour (Dickie 1878).

Smith Sound: Fram Haven and Pim Island (Rosenvinge 1926).

Jones Sound: Craig Harbour (Lund 1933), Harbour Fjord, Goose Fjord, and Cape Vera (Rosenvinge 1926).

Hell Gate: "Excrement Bay" or Cross Bay (Rosenvinge 1926).

Baffin Bay: Bethune Inlet (Dickie 1871, as *Conferva melagonium*), Cape Bowen (Dickie 1853, as *C. melagonium*).

Lancaster Sound: Dundas Harbour (Bell and MacFarlane 1938).

Bellot Strait: Port Kennedy (Dickie 1861, as *C. melagonium*).

Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938).

Davis Strait: Cumberland Sound (Dickie 1867, also as *Chaetomorpha tortuosa*).

Hudson Strait: Forbes Sound and False River Bay (Wilce 1959), Westbourne Bay (Wheldon 1947, as *C. tortuosa*), Lake Harbour and Wakeham Bay (Bell and MacFarlane 1938), Hudson Strait (Bell and MacFarlane 1933).

New records.

Kane Basin: northern Pim Island *9586, 9610.*

Jones Sound: Cape Skogn *9224*, near Cape Newman Smith *9237.*

Prince Regent Inlet: Creswell Bay *8878.*

Gulf of Boothia: Netsiksiuvik Inlet *8739.*

Eclipse Sound: near Pond Inlet *2675.*

Davis Strait: Frobisher Bay *CANA 16966.*

Hudson Strait: Westbourne Bay *2442.1*, Negus Bay *2566.*

Repulse Bay: Talun Bay *74-256-7.*

Hudson Bay: Munn Bay *74-255-12*, Eskimo Point *74-250-34.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Austin Bay and Bernard Harbour (Collins 1927a, *CANA 4045*).

New records.

St. Roch Basin: Spence Bay *74-259-3.*

Rasmussen Basin: Peterson Bay *74-262-6.*

Simpson Strait: Eta Island *8626, 9022*, M'Clintock Bay *74-264-1.*

Queen Maud Gulf: Royal Geographical Society Islands *8608*, Enterprise Point *7918*, Anderson Bay *8186, 8465*, Foggy Bay *8134*, near Minto Islands *7999.*

Dease Strait: Starvation Cove *7280*, Qikirtaarjuk Islands *7142*, near Duncan Island *7191.*

Elu Inlet: unnamed island *8037.*

Melville Sound: Hurd Islands *8358.*

Bathurst Inlet: Cape Croker *8504.*

Coronation Gulf: Anchor Island *6956.*

Dolphin and Union Strait: Bernard Harbour *6864*, Cockburn Point *8573.*

Amundsen Gulf: De Salis Bay *4548*, Sachs Harbour *3361*, Pearce Point *4480*, Gillet Bay *6795*, Police Point *4311.*

Northwestern distribution.

Literature records.

Barrow Strait: Assistance Bay (Dickie 1852, as *C. melagonium*).

Crozier Channel: Manson Point (Lee 1966).

New records.

Queens Channel: Milne Island *9100.*

Barrow Strait: Assistance Bay *9505*, Allison Inlet *9380.*

McDougall Sound: Templeton Bay *9105*, Brooman Point *9250*, Freemans Cove *9312.*

Byam Channel: near Richardson Point *DH13-7*, near Robertson Point *DH7-10.*

Hecla and Griper Bay: Cape Fisher *3100.*

Kellett Strait: near Pedder Point *3088.*

Crozier Channel: Manson Point *3135.*

Beaufort Sea: Cape Prince Alfred *3061.5.*

Cladophora sericea (Hudson) Kützing

Kjellman 1883, p. 308, as *C. glaucescens* and *C. gracilis*; Rosenvinge 1893, p. 910, as

* *Chaetomorpha tortuosa* (Dillwyn) Kleen, not to be confused with *C. tortuosa* Kützing, which Børgesen (1925) considered to be a species of "warmer seas" and reduced it to synonymy under *C. capillaris* (Kützing) Børgesen.

C. gracilis; 1898, p. 103; Taylor 1957, p. 84, as *C. flexuosa, C. glaucescens, C. gracilis,* and *C. rudolphiana.*

Scagel 1966, p. 88, pl. 43, fig. D, pl. 44, figs. B-C, pl. 45, figs. A-C, pl. 46, fig. A, as *C. glaucescens* and *C. gracilis.*

Subtidal at Anchor Island.

Eastern distribution.

Literature records.

Hudson Strait: Port Burwell, Koksoak River, and Fort Chimo (Wilce 1959, as *Cladophora glaucescens* and *C. rudolphiana*), Ungava Bay (Farlow 1886, as *C. glaucescens* and *C. gracilis*).

Southwestern distribution.

New records.

Coronation Gulf: Anchor Island *6971.*

Cladophora sp.

At depths of 2-15 m on rocks or loose-lying. At times epiphytic on *Sphacelaria* and *Fucus.* Occasional. Some specimens may be referred to as *Cladophora pachyderma* (Kjellman) Brand, but the majority could not be reliably assigned to any described species.

Eastern distribution.

New records.

Eclipse Sound: near Pond Inlet *2694.*

Hudson Strait: Westbourne Bay *2470,* Wakeham Bay *2637.*

Southwestern distribution.

New records.

Queen Maud Gulf: Enterprise Point *7902,* Anderson Bay *8284,* Foggy Bay *8150.*

Dease Strait: Starvation Cove *7282,* near Duncan Island *7195.*

Melville Sound: Hurd Islands *8371.*

Bathurst Inlet: Cape Croker *8479,* Buchan Bay *8542.*

Dolphin and Union Strait: Cockburn Point *8570.*

Amundsen Gulf: De Salis Bay *4569,* Sachs Harbour *3342.1, 4645,* Duck Hawk Bluff *4621,* Police Point *6685.*

Northwestern distribution.

New records.

Penny Strait: Hungry Bay *62-4303.*

Barrow Strait: Allison Inlet *9375.*

McDougall Sound: Brooman Point *9267,* Freemans Cove *9307.*

Crozier Channel: Manson Point *3133.*

Beaufort Sea: Cape Prince Alfred *3342.1.*

DIVISION PHAEOPHYTA
Class Phaeophyceae

Order Ectocarpales
Family Ectocarpaceae

Pilayella littoralis (Linnaeus) Kjellman

Kjellman 1883, p. 281, pl. 27, also as *P. varia;* Rosenvinge 1883, p. 881, as *Ectocarpus littoralis;* Waern 1952, p. 111, as *P. rupincola;* Taylor 1957, p. 102, pl. 9, figs. 1-3; Lund 1959, p. 37; West 1967, p. 150, figs. 1-7.

Intertidal (Davis Strait, Hudson Strait, Hudson Bay, James Bay, and Police Point) and to a depth of 15 m. Growing on rocks, ascidians, and other algae: *Chaetomorpha melagonium, Sphacelaria arctica, S. plumosa, Punctaria glacialis, Stictyosiphon tortilis, Desmarestia aculeata, Laminaria* (stipe and haptera), *Fucus distichus, Neodilsea integra,* and *Rhodymenia palmata.* Frequent.

Eastern distribution.

Literature records.

Smith Sound: Fram Haven (Rosenvinge 1926).

Jones Sound: Craig Harbour (Lund 1933).

Fram Sound: Norfolk Inlet (Rosenvinge 1926).

Cardigan Strait: Devil Island (Rosenvinge 1926).

Baffin Bay: Bethune Inlet (Dickie 1871, as *Ectocarpus littoralis?*).

Lancaster Sound: Dundas Harbour (Wheldon 1947).

Davis Strait: Cumberland Sound (Dickie 1867, as *E. littoralis;* Farlow 1879, as *E. farlowii* and *E. firmus;* 1886, as *E. littoralis),* Pangnirtung (Wheldon 1947).

Hudson Strait: Ungava Bay (Farlow 1886, as *E. littoralis;* Wilce 1959), Forbes Sound (Wheldon 1947), Westbourne Bay and Wakeham Bay (Wheldon 1947), Hudson Strait (Bell and MacFarlane 1933).

Hudson Bay: Chesterfield Inlet (Wheldon 1947), between Otaska Harbour and Black Whale Harbour (Howe 1927, *CANA 4175*), Hudson Bay (Bell and MacFarlane 1933).

James Bay: James Bay (Setchell and Collins 1908), Grey Goose Island, Old Factory Bay, and Charlton Island (Howe 1927, *CANA 4176, 4174* and *4177*).

New records.

Admiralty Inlet: Arctic Bay *2741.*
Prince Regent Inlet: Creswell Bay *8899.*
Bellot Strait: near Brands Island *74-261A-2.*
Eclipse Sound: near Pond Inlet *2693.*
Hudson Strait: Westbourne Bay *2436,* Negus Bay *2544*, Wakeham Bay *2614,* Sugluk *2611.2.*
Foxe Channel: Stanley Harbour *74-255A-7.*
Repulse Bay: Talun Bay *74-256-5.*
Hudson Bay: Ivugivik *2591.1,* Great Whale River *Savile 690.*
James Bay: Ekwan River *CANA 8770.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Austin Bay (Collins 1927a).

New records.

St. Roch Basin: Peel Inlet *8967.*
Simpson Strait: Eta Island *8662, 9007.*
Queen Maud Gulf: Royal Geographical Society Islands *8626,* Enterprise Point *7934*, Anderson Bay *8179, 8469,* Foggy Bay *8140,* near Minto Islands *8021.*
Dease Strait: Starvation Cove *7241*, Qikirtaarjuk Islands *6986,* near Duncan Island *7161.*
Elu Inlet: unnamed island *8050.*
Melville Sound: Kuururjuak Point *8392,* Hurd Islands *8373.*
Bathurst Inlet: Cape Croker *8505,* Buchan Bay *8532.*
Coronation Gulf: Anchor Island *6922.*
Dolphin and Union Strait: Bernard Harbour *6848,* Cockburn Point *8571.*
Amundsen Gulf: De Salis Bay *4581,* Sachs Harbour *3337*, Pearce Point *4477,* Gillet Bay *6796,* Police Point *4392, 6686,* Booth Island *6607.*

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966).

New records.

Queens Channel: Milne Island *9100.*
Wellington Channel: Snowblind Bay *9160.*
Barrow Strait: Radstock Bay *9319,* Cunningham Inlet *9766,* Allison Inlet *9376.*
McDougall Sound: Brooman Point *9258*, Freemans Cove *9313.*
Byam Channel: near Robertson Point *DH7-13.*
Wilkins Strait, south of: Brock Island *3161.1.*
Hecla and Griper Bay: Cape Fisher *3107.4.*
Crozier Channel: Manson Point *3112.1.*
Beaufort Sea: Cape Prince Alfred *3070.*

Ectocarpus fasciculatus Harvey

Kjellman 1883, p. 279; Taylor 1957, p. 107; Jaasund 1965, p. 33, figs. 7-8.

Subtidal at Port Burwell.

Eastern distribution.

Literature records.

Davis Strait: Cumberland Sound (Farlow 1879, as *E. landsburgii*).
Hudson Strait: Forbes Sound (Wilce 1959).

Ectocarpus siliculosus (Dillwyn) Lyngbye

Kjellman 1883, p. 277, as *E. confervoides;* Rosenvinge 1893, p. 882, figs. 21-22, also as *E. confervoides* and *E. penicillatus;* 1898, p. 76, also as *E. confervoides* and *E. penicillatus;* Waern 1952, p. 113, figs. 50-51, as *E. confervoides;* Taylor 1957, p. 105, pl. 8, figs. 1-5, also as *E. confervoides, E. dasycarpus,* and *E. penicillatus;* Lund 1959, p. 40, as *E. confervoides.*

At the 2-9 m depth on *Sphacelaria arctica* and *Fucus distichus.* Rare.

Eastern distribution.

Literature records.

Davis Strait: Cumberland Sound (Farrow 1879, as *Ectocarpus hiemalis*).
Hudson Strait: Forbes Sound, False River Bay, and Koksoak River (Wilce 1959, also as *E. confervoides*).
Hudson Bay: Richmond Gulf, between Otaska Harbour and Black Whale Harbour, and Long Island Sound (Howe 1927, *CANA 4228, 4227* and *4251*).
James Bay: Grey Goose Island and Charlton Island (Howe 1927, *CANA 4242* and *4241*).

New records.

Adams Sound: Arctic Bay *2731.*

Southwestern distribution.

New records.

Amundsen Gulf: Booth Island *6588.*

Giffordia ovata (Kjellman) Kylin

Kjellman 1883, p. 279, as *Ectocarpus ovatus;* Rosenvinge 1893, p. 888, fig. 24, as *E. ovatus* and *E. holmii;* 1898, p. 77, fig. 16, as *E. ovatus;* Taylor 1957, p. 110; Lund 1959, p. 43; Cardinal 1964, p. 49, fig. 26; Jaasund 1965, p. 40, fig. 10a.

From a depth of 15 m to shallower waters

attached to rocks, ascidians, limpets, *Chaetomorpha melagonium, Desmarestia aculeata* (stipe), *Neodilsea integra, Turnerella pennyi,* and *Rhodomela lycopodioides.* Occasional.

Eastern distribution.

Literature records.

Hudson Strait: Forbes Sound (Wilce 1959).

New records.

Hall Basin: Discovery Harbour *9665.*

Hudson Strait: Negus Bay *2508.*

Southwestern distribution.

New records.

Amundsen Gulf: Sachs Harbour *3367,* Police Point *4334,* Booth Island *6619.*

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966).

New records.

Penny Strait: near Russell Island *9737.*

McDougall Sound: Freemans Cove *9314.*

Byam Channel: near Robertson Point *DH22-12.*

Wilkins Strait, south of: Brock Island *3156.3.*

Beaufort Sea: Cape Prince Alfred *3061.2.*

Laminariocolax tomentosoides (Farlow) Kylin

Rosenvinge 1893, p. 890, fig. 25, as *Ectocarpus tomentosoides;* Taylor 1957, p. 108, as *E. tomentosoides;* Lund 1959, p. 51, fig. 7; Cardinal 1964, p. 67, fig. 36.

On the stipe of *Laminaria* plants (*L. longicruris* at Creswell Bay and Fox Islands) at depths within 3 and 12 m. Rare.

Eastern distribution.

Literature records.

Cardigan Strait: Devil Island (Rosenvinge 1926, as *Ectocarpus tomentosoides*).

New records.

Prince Regent Inlet: Creswell Bay *8896.*

Bellot Strait: Fox Islands *8853.*

Hudson Strait: Wakeham Bay *2653.2.*

Hudson Bay: Ivugivik *2593.5.*

Streblonema stilophorae (Crouan and Crouan) Hamel

Rosenvinge 1893, p. 892, fig. 26, as *Ectocarpus stilophorae;* Jónsson 1903a, p. 152.

Eastern distribution.

Literature records.

Hudson Strait: Forbes Sound (Wilce 1959).

Kolderupia maritima (Kjellman) S. Lund

Kjellman 1883, p. 285, as *Chaetophora maritima;* Rosenvinge 1893, p. 932, fig. 43, as *Pilinia maritima;* Lund 1959, p. 54.

On intertidal rocks. Densely occurring in the common mucilagenous matrix of colonies of blue-green algae, of which *Calothrix scopulorum* is the major component. Rare.

Eastern distribution.

New records.

Eclipse Sound: near Pond Inlet *2711.*

Phaeostroma parasiticum Børgesen

Børgesen 1902, p. 441, fig. 83; Lund 1959, p. 64, fig. 9a.

Growing on the blades of *Laminaria* at the 4-13 m depth. Rare.

Eastern distribution.

New records.

Hudson Strait: Westbourne Bay *2489.*

Northwestern distribution.

Literature records.

Crozier Channel: Mould Bay (Lee 1966).

New records.

Byam Martin Channel: near Robertson Point *DH7-9.*

Byam Channel: Nelson Griffiths Point *DH8-3.*

Beaufort Sea: Cape Prince Alfred *3072.2.*

Phaeostroma pustulosum Kuckuck

Rosenvinge 1898, p. 68, fig. 15; Jónsson 1903a, p. 165, figs. 20-21; Lund 1959, p. 63; Jaasund 1963, p. 5, fig. 3.

At depths of 2-15 m growing on a variety of other algae and on hydroids. Of the 17 species of algal hosts the more frequent ones were, in descending order, *Chaetomorpha melagonium, Stictyosiphon tortilis, Rhodomela lycopodioides, Dictyosiphon foeniculaceus, Pilayella littoralis,* and *Punctaria glacialis.* Frequent in the southwest, occasional elsewhere.

Eastern distribution.

New records.

Prince Regent Inlet: Creswell Bay *8879.*

Eclipse Sound: near Pond Inlet *2699.2.*

Hudson Strait: Wakeham Bay *2640.2.*

Foxe Channel: Stanley Harbour *74-255A-2.*

Hudson Bay: Rankin Inlet *74-253A-16,* Eskimo Point *74-250-36.*

Southwestern distribution.

New records.

St. Roch Basin: Peel Inlet *8985.*

Simpson Strait: Eta Island *8669, 9015,* M'Clintock Bay *74-264-3.*

Queen Maud Gulf: Royal Geographical Society Islands *8607,* Enterprise Point *7898,* Anderson Bay *8217, 8468,* Foggy Bay *8149,* near Minto Islands *8010.*
Dease Strait: Starvation Cove *7242,* Qikirtaarjuk Islands *7097,* near Duncan Island *7202.*
Elu Inlet: unnamed island *8053.*
Melville Sound: Kuururjuak Point *8404,* Hurd Islands *8359.*
Bathurst Inlet: Cape Croker *8495.*
Dolphin and Union Strait: Bernard Harbour *6860,* Cockburn Point *8554.*
Amundsen Gulf: De Salis Bay *4549,* Sachs Harbour *3335, 4643,* Duck Hawk Bluff *4620,* Gillet Bay *6814,* Police Point *4253,* Booth Island *6557.*

Northwestern distribution.
New records.
Barrow Strait: Allison Inlet *9372.*
McDougall Sound: Brooman Point *9262.*
Wilkins Strait, south of: Brock Island *3171.1.*
Kellet Strait: near Pedder Point *3089.*
Crozier Channel: Manson Point *3121.1.*
Beaufort Sea: Cape Prince Alfred *3073.2.*

Family Ralfsiaceae

Symphyocarpus strangulans Rosenvinge
Rosenvinge 1893, p. 896, figs. 28-29; 1898, p. 67; Lund 1959, p. 70, fig. 11; Jaasund 1963, p. 6, fig. 4.
Epiphytic on *Chaetomorpha melagonium, Punctaria glacialis, Neodilsea integra,* and *Phycodrys rubens* at depths of 2-9 m. Rare.
Eastern distribution.
New records.
Hudson Bay: Munn Bay *74-254-9.*
Southwestern distribution.
New records.
Queen Maud Gulf: Enterprise Point *7919,* Foggy Bay *8133.*
Dease Strait: Qikirtaarjuk Islands *7113.*
Amundsen Gulf: Gillet Bay *6815.*

Ralfsia clavata (Harvey) Crouan and Crouan
Rosenvinge 1893, p. 899; Taylor 1957, p. 136; Lund 1959, p. 78, as *R. tenuis.*
On rocks at the 1-9 m depth and also intertidal in Hudson Strait.
Eastern distribution.
Literature records.
Hudson Strait: Forbes Sound (Wilce 1959).
New records.
Bellot Strait: near Brands Island *74-261A-3.*
Hudson Strait: Wakeham Bay *2670.3,* Sugluk Inlet *2603.1.*
*Southwestern distribution.**
New records.
Amundsen Gulf: Booth Island *6593.*

Ralfsia fungiformis (Gunner) Setchell and Gardner
Kjellman 1883, p. 248, as *R. deusta;* Rosenvinge 1893, p. 898, as *R. deusta;* 1898, p. 93, as *R. deusta;* Taylor 1957, p. 134.
At the 3-10 m depth on rocks and the haptera of *Laminaria longicruris.* Rare.
Eastern distribution.
Literature records.
Davis Strait: Cumberland Sound (Dickie 1867, as *R. deusta*).
Hudson Strait: Ungava Bay (Farlow 1886, as *R. deusta*).
James Bay: vicinity Halfway Point (Howe 1927, as *R. deusta, CANA 4193*).
New records.
Hudson Strait: Westbourne Bay *2510.*
Hudson Bay: Ivugivik *2590.1.*

Ralfsia ovata Rosenvinge
Rosenvinge 1893, p. 900, fig. 30; 1898, p. 94.
On rocks within the 2 and 25 m depth. Rare.
Southwestern distribution.
New records.
Gulf of Boothia: Netsiksiuvik Inlet *8749.*
Northwestern distribution.
New records.
Wilkins Strait, south of: Brock Island *3155.6.*

Ralfsia verrucosa (Areschoug) J. Agardh
Kjellman 1883, p. 249; Rosenvinge 1893, p. 899; Taylor 1957, p. 135, pl. 11, figs. 1-2; Jaasund 1965, p. 61.
In intertidal pools at Forbes Sound.
Eastern distribution.
Literature records.
Davis Strait: Pangnirtung (Wheldon 1947).
Hudson Strait: Forbes Sound (Wilce

* The *Ralfsia pusilla* specimens *(CANA 4042)* reported by Collins (1927a) from Austin Bay, Dolphin and Union Strait, is *Sorapion kjellmanii.*

1959), Westbourne Bay (Wheldon 1947), Hudson Strait (Bell and MacFarlane 1933).

Sorapion kjellmanii (Wille) Rosenvinge

Rosenvinge 1893, p. 902, as *Lithoderma kjellmanii;* 1898, p. 95; Waern 1949, p. 662, figs. 2a-d; Taylor 1957, p. 138; Lund 1959, p. 79, fig. 14.

At the 2-15 m depth on rocks, other algae, and invertebrates (*Mytilus, Acmaea, Serripes,* etc.). The algal host included *Chaetomorpha melagonium* (most common), *Punctaria glacialis, Fucus distichus, Neodilsea integra,* and *Rhodomela lycopodiodes.* Frequent.

Eastern distribution.

Literature records.

Jones Sound: Harbour Fjord (Rosenvinge 1926).

Hell Gate: "Excrement Bay" or Cross Bay (Rosenvinge 1926).

Hudson Strait: Forbes Sound and False River Bay (Wilce 1959).

New records.

Kane Basin: northern Pim Island *9587.*

Jones Sound: near Cape Newman Smith *9239.*

Adams Sound: Arctic Bay *2748.*

Prince Regent Inlet: Creswell Bay *8887.*

Eclipse Sound: near Pond Inlet *2677.*

Hudson Bay: Eskimo Point *74-250-6.*

Southwestern distribution.

New records.

St. Roch Basin: Peel Inlet *8976.*

Simpson Strait: Eta Island *8688, 9009,* M'Clintock Bay *74-264-2.*

Victoria Strait: Victory Point *8951.*

Queen Maud Gulf: Royal Geographical Society Islands *8611,* Enterprise Point *7913,* Anderson Bay *8197, 8467, 74-269-7,* Foggy Bay *8124,* near Minto Islands *7992.*

Dease Strait: Starvation Cove *7240,* Qikirtaarjuk Islands *6987,* near Duncan Island *7218.*

Elu Inlet: unnamed island *8034.*

Melville Sound: Kuururjuak Point *8388,* Hurd Islands *8342.*

Bathurst Inlet: Cape Croker *8494,* Buchan Bay *8523.*

Coronation Gulf: Anchor Island *6951.*

Dolphin and Union Strait: Austin Bay *CANA 4042,* Bernard Harbour *6854.*

Amundsen Gulf: De Salis Bay *4551,* Sachs Harbour *3363,* Gillet Bay *6811,* Police Point *6653,* Booth Island *6604.*

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966).

New records.

Wellington Channel: Snowblind Bay *9158.*

Barrow Strait: Radstock Bay *9324,* Allison Inlet *9381.*

McDougall Sound: Templeton Bay *9106,* Brooman Point *9251.*

Byam Channel: near Consett Head *DH14.*

Crozier Channel: Manson Point *3114.*

Beaufort Sea: Cape Prince Alfred *3061.8.*

Lithoderma fatiscens Areschoug

Kjellman 1883, p. 255, pl. 26, figs. 6-7, in part; Rosenvinge 1893, p. 901, in part; Waern 1949, p. 652, figs. 2e-g; Lund 1959, p. 83.

On rocks within the 2 and 15 m depth. Occasional.

Eastern distribution.

New records.

Kane Basin: Norman Lockyer Island *9712.*

Prince Regent Inlet: Creswell Bay *8871.*

Gulf of Boothia: Victoria Harbour *8780,* Netsiksiuvik Inlet *8748.*

Hudson Strait: Negus Bay *2568.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cockburn Point (Collins 1926a).

New records.

St. Roch Basin: Peel Inlet *8982.*

Simpson Strait: Eta Island *9032.*

Victoria Strait: Victory Point *8953.*

Queen Maud Gulf: Anderson Bay *8210.*

Dease Strait: Starvation Cove *7254.*

Amundsen Gulf: Pearce Point *4486.*

Pseudolithoderma extensum (Crouan and Crouan) S. Lund

Rosenvinge 1898, p. 97, as *Lithoderma fatiscens,* in part; Waern 1949, p. 658, figs. 2i-j, as *L. extensum;* Taylor 1957, p. 137, as *L. extensum;* Lund 1959, p. 84.

On rocks at the 2-10 m depth and also intertidal at Wakeham Bay. Occasional.

Eastern distribution.

Literature records.

Smith Sound: Rice Strait (Rosenvinge 1926, as *Lithoderma extensum*).

Jones Sound: Goose Fjord, "Jammer Bay" or Bay of Woe, and Cape Vera (Rosenvinge 1926, as *L. extensum*).

Fram Sound: Norfolk Inlet (Rosenvinge 1926, as *L. extensum*).
Hudson Strait: Forbes Sound (Wilce 1959, as *L. extensum*).
New records.
Hudson Strait: Westbourne Bay *2479*, Negus Bay *2569*, Wakeham Bay *2652, 2672.1*.
Hudson Bay: Ivugivik Harbour *2585.6*.
Southwestern distribution.
New records.
Queen Maud Gulf: Foggy Bay *8108*.
Dease Strait: Qikirtaarjuk Islands *7094*.
Bathurst Inlet: Cape Croker *8476*, *Buchan Bay 8525*.
Amundsen Gulf: Pearce Point *4511*, Police Point *6658*, Booth Island *6592*.
Northwestern distribution.
New records.
Wilkens Strait, south of: Brock Island *3155*.

Pseudolithoderma rosenvingii (Waern) S. Lund

Rosenvinge 1898, p. 97, fig. 22, as *Lithoderma fatiscens*, in part; Waern 1949, p. 654, figs. 2h, 3, pl. 2, as *L. rosenvingii;* 1952, p. 146, fig. 66, as *L. rosenvingii;* Lund 1959, p. 84.

At the 2-9 m depth on rocks. Occasional in the southwest.

Southwestern distribution.
New records.
Queen Maud Gulf: Enterprise Point *7924*.
Melville Sound: Hurd Island *8311*.
Dolphin and Union Strait: Cockburn Point *8564*.
Amundsen Gulf: Booth Island *6594*.
Northwestern distribution.
Literature records.
Crozier Channel: Manson Point (Lee 1966, as *Lithoderma rosenvingii*).

Pseudolithoderma subextensum (Waern) S. Lund

Waern 1949, p. 659, fig. 4, pl. 3, as *Lithoderma subextensum;* 1952, p. 148, fig. 67, as *L. subextensum*.

On rocks at depths of 2-12 m and also intertidal in Hudson Strait. Occasional.

Eastern distribution.
New records.
Kane Basin: Copes Bay *9696*.
Jones Sound: Cape Skogn *9218*.
Hudson Strait: Westbourne Bay *2490*, Negus Bay *2567*, Wakeham Bay *2670.1*.
Southwestern distribution.
New records.
Queen Maud Gulf: near Minto Islands *7995*.
Coronation Gulf: Anchor Island *6902*.
Dolphin and Union Strait: Cockburn Point *8565*.
Amundsen Gulf: Booth Island *6600*.
Northwestern distribution.
New records.
Wilkens Strait, south of: Brock Island *3154.4*.

Order Sphacelariales
Family Sphacelariaceae

Sphacelaria arctica Harvey

Kjellman 1883, p. 274; Rosenvinge 1893, p. 904, as *S. racemosa* var. *arctica*; 1898, p. 100, as *S. racemosa* var. *arctica*; Waern 1952, p. 100, figs. 39b, 41, 43-44, 47b; Taylor 1957, p. 120, as *S. racemosa* var. *arctica*; Lund 1959, p. 95.

At depths of 2-15 m on rocks, *Chaetomorpha melagonium,* and *Fucus distichus*. Also intertidal in Hudson Strait and Hudson Bay, and possibly forming loose-lying populations on mud substrates. Frequent.

Eastern distribution.
Literature records.
Smith Sound: Pim Island (Rosenvinge 1926, as *S. racemosa* var. *arctica*).
Baffin Bay: Bethune Bay (Dickie 1871).
Davis Strait: Cumberland Sound (Dickie 1867, Farlow 1879, 1886).
Hudson Strait: Ungava Bay (Wilce 1959, as *S. racemosa* var. *arctica*).
New records.
Adams Sound: Arctic Bay *2731.3*.
Prince Regent Inlet: Creswell Bay *8889*.
Eclipse Sound: near Pond Inlet *2689*.
Hudson Strait: Westbourne Bay *2469*, Negus Bay *2542.1*, Wakeham Bay *2644*.
Foxe Channel: Stanley Harbour *74-255A-18*.
Hudson Bay: Eskimo Point *74-250A-4*.
Southwestern distribution.
New records.
Rasmussen Basin: Peterson Bay *74-262B-4*.
Simpson Strait: Eta Island *8700*.
Victoria Strait: Victoria Point *8960*.
Queen Maud Gulf: Royal Geographical Society Islands *8631*, Anderson Bay *8234, 8460*, Foggy Bay *8095*, near Minto Islands *8015*.

Dease Strait: Qikirtaarjuk Islands *7103,* near Duncan Island *7201.*
Elu Inlet: unnamed island *8046.*
Melville Sound: Hurd Islands *8374.*
Bathurst Inlet: Cape Croker *8483,* Buchan Bay *8536.*
Coronation Gulf: Anchor Island *6928.*
Dolphin and Union Strait: Bernard Harbour *6841,* Cockburn Point *8569.*
Prince of Wales Strait: Berkeley Point *9482.*
Amundsen Gulf: Sachs Harbour *3353,* Pearce Point *4484, 4491,* Gillet Bay *6755,* Police Point *4232, 6680,* Booth Island *6611.*

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966).

New records.

Barrow Strait: Radstock Bay *9320,* Allison Inlet *9359.*
McDougall Sound: Brooman Point *9257.*
Viscount Melville Sound: near Little Point *DH2S7-13.*
Hecla and Griper Bay: Cape Fisher *3095.*
Crozier Channel: Manson Point *3140.7.*

Sphacelaria cirrosa (Roth) C. Agardh

Kjellman 1883, p. 274; Taylor 1957, p. 121, pl. 17, figs. 1-6; Jaasund 1965, p. 70.

At a depth of 18 m at Grey Goose Island.

Eastern distribution.

Literature records.

Davis Strait: Cumberland Sound (Dickie 1867, as *S. pennata*).
James Bay: Grey Goose Island (Howe 1927).

Sphacelaria plumosa Lyngbye

Kjellman 1883, p. 273, as *Chaetopteris plumosa;* Rosenvinge 1893, p. 903, as *C. plumosa;* 1898, p. 99, as *C. plumosa;* Taylor 1957, p. 122, as *C. plumosa;* Lund 1959, p. 98, as *C. plumosa.*

At depths of 2-30 m on rocks, *Ahnfeltia plicata,* and *Laminaria* haptera. Also on intertidal pebbles at Eskimo Point. Frequent.

Eastern distribution.

Literature records.

Robeson Channel: Floeberg Beach (Dickie 1878, as *Chaetopteris plumosa*).
Smith Sound: Pim Island (Rosenvinge 1926, as *C. plumosa*).
Baffin Bay: Bethune Bay (Dickie 1871).
Davis Strait: Cumberland Sound (Dickie 1867, Farlow 1879, 1886, all as *C. plumosa*).
Hudson Strait: Hudson Strait (Bell and MacFarlane 1933, as *C. plumosa*), Forbes Sound (Wilce 1959, as *C. plumosa*).
Hudson Bay: Depot Island (Setchell and Collins 1908, as *C. plumosa*), between Otaska Harbour and Black Whale Harbour (Howe 1927, as *C. plumosa, CANA 4190*).
James Bay: James Bay (Setchell and Collins 1908, as *C. plumosa*), Grey Goose Island (Howe 1927, as *C. plumosa, CANA 4189*).

New records.

Jones Sound: near Cape Newman Smith *9219,* Boat Point *9173.*
Prince Regent Inlet: Creswell Bay *8877.*
Hudson Strait: Westbourne Bay *2512,* Negus Bay *2556.2.*
Hudson Bay: Munn Bay *74-255-11,* Rankin Inlet *74-253A-15,* Eskimo Point *74-250-10,* Churchill *Crum 7581.*
James Bay: Swan River *CANA 4802.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Austin Bay, Cockburn Point, and Cape Young (Collins 1927a, as *C. plumosa, CANA 4037, 4032* and *4038*).

New records.

St. Roch Basin: Peel Inlet *8990.*
Simpson Strait: Eta Island *9039.*
Victoria Strait: Victory Point *8962.*
Queen Maud Gulf: Enterprise Point *7935,* Anderson Bay *8287, 8471,* Foggy Bay *8111,* near Minto Islands *8011.*
Dease Strait: Starvation Cove *7273,* Qikirtaarjuk Islands *7205.*
Coronation Gulf: Anchor Island *6975.*
Dolphin and Union Strait: Cockburn Point *8568.*
Prince of Wales Strait: Berkeley Point *9481.*
Amundsen Gulf: De Salis Bay *4547,* Thesiger Bay *3372,* Sachs Harbour *3364,* Pearce Point *4406,* Gillet Bay *6756,* Police Point *4233,* Booth Island *6563.*

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966, as *C. plumosa*).

New records.

Barrow Strait: Cunningham Inlet *9770,* Allison Inlet *9378.*
Byam Channel: near Robertson Point *DH15-12.*
Kellett Strait: near Pedder Point *3085.*
Crozier Channel: Manson Point *3117.*
Beaufort Sea: Cape Prince Alfred *3060.1.*

Sphacelaria radicans (Dillwyn) C. Agardh
Kjellman 1883, p. 275, as *S. olivacea*; Waern 1952, p. 96, figs. 38, 39d; Taylor 1957, p. 119; Jaasund 1965, p. 68.
At the 18 m depth in Hudson Bay.
Eastern distribution.
Literature records.
Hudson Bay: between Otaska Harbour and Black Whale Harbour (Howe 1927, *CANA 4170*).

Order Tilopteridales
Family Tilopteridaceae

Haplospora globosa Kjellman
Kjellman 1883, p. 211, also as *Scaphospora arctica*; Rosenvinge 1898, p. 48, as *S. arctica;* Taylor 1957, p. 125; Lund 1959, p. 88, figs. 16-17; South 1975, p. 698, figs. 3-4.
In the southwest, both loose-lying and attached to rocks at depths between 2 and 20 m. The Hudson Bay material was found "floating" (Howe 1927) and that of Eclipse Sound was on *Halosaccion ramentaceum* that had drifted to shore. The Eclipse Sound specimens were sporophytes, while those from the southwestern region consisted of sporophytes and gametophytes. Occasional in the southwest, rare in the east.
Eastern distribution.
Literature records.
Hudson Bay: Long Island Sound (Howe 1927, *CANA 4226*).
New records.
Eclipse Sound: near Pond Inlet *2676.*
Southwestern distribution.
New records.
Simpson Strait: Eta Island *8699.*
Dease Strait: Qikirtaarjuk Islands *7144.*
Amundsen Gulf: De Salis Bay *4583,* Thesiger Bay *3378,* Police Point *4258,* Booth Island *6608.*

Order Chordariales
Family Myrionemataceae

Dermatocelis laminariae Rosenvinge
Rosenvinge 1898, p. 89, fig. 21; Jónsson 1903a, p. 148, fig. 9, as *Myrionema laminariae;* Lund 1959, p. 107, fig. 21.
At the 15-18 m depth occurring in dense patches on the upper portion of blades of *Laminaria solidungula.* Rare.
Eastern distribution.
New records.
Fram Sound: Rodberg Bay *9180.*

Hecatonema foecundum (Strömfelt) Loiseaux
Jónsson 1903a, p. 149, figs. 10-12, as *Ascocyclus islandicus*; Taylor 1957, p. 132, as *Myrionema foecundum*; Lund 1959, p. 109, fig. 22, as *A. foecundus*; Loiseaux 1967, p. 531, figs. 1-5, pl. 1.
On *Fucus distichus* and *Chaetomorpha melagonium* between the 2 and 8 m depth. Rare.
Southwestern distribution.
New records.
Dease Strait: Qikirtaarjuk Islands *7104.*
Elu Inlet: unnamed island *8042.*

Hecatonema maculans (Collins) Sauvageau
Taylor 1957, p. 129; Lund 1959, p. 59; Cardinal 1964, p. 76, fig. 40.
On *Sphacelaria plumosa* and *Fucus distichus* between the 2 and 9 m depth. Rare.
Southwestern distribution.
New records.
Queen Maud Gulf: Foggy Bay *8103.*
Amundsen Gulf: Sachs Harbour *3338.*

Leptonematella fasciculata (Reinke) Silva
Rosenvinge 1893, p. 879, as *Leptonema fasciculatum;* 1898, p. 75, as *Elachista fasciculata;* Taylor 1957, p. 143, as *L. fasciculatum;* Lund 1959, p. 113, fig. 24, as *L. fasciculatum.*
Epiphytic on other algae at depths of 3-18 m. On one occasion also growing on limpets. Among the 17 species of algal hosts, the more common ones were *Chaetomorpha melagonium, Sphacelaria plumosa, Stictyosiphon tortilis, Punctaria glacialis, Polysiphonia arctica,* and *Rhodomela lycopodioides.* Occasional in the eastern region, frequent in the southwest.
Eastern distribution.
New records.
Prince Regent Inlet: Creswell Bay *8895.*
Bellot Strait: Fox Islands *8854.*
Gulf of Boothia: Victoria Harbour *8763.*
Hudson Strait: Negus Bay *2579.2.*
Foxe Channel: Stanley Harbour *74-255A-3.*
Hudson Bay: Munn Bay *74-254-7,* Ivugivik *2592.3,* Eskimo Point *74-250-37.*

Southwestern distribution.
New records.
St. Roch Basin: Peel Inlet *8986.*
Simpson Strait: Eta Island *8670, 9040.*
Queen Maud Gulf: Enterprise Point *7909,* Anderson Bay *8425,* Foggy Bay *8117,* near Minto Islands *7987.*
Dease Strait: Starvation Cove *7248,* Qikirtaarjuk Islands *7118,* near Duncan Island *7204.*
Elu Inlet: unnamed island *8041.*
Amundsen Gulf: Prince Albert Sound *9462,* Sachs Harbour *3341.3, 4644,* Police Point *6630,* Booth Island *6618.*

Microsporangium globosum Reinke
Rosenvinge 1898, p. 86, figs. 19-20, as *Phycocelis globosus;* Jónsson 1903a, p. 146, figs. 5-8, as *Myrionema globosum;* Taylor 1957, p. 131, as *M. globosum;* Lund 1959, p. 111, fig. 23; Jaasund 1965, p. 60.
At Rankin Inlet, intertidal on *Spacelaria plumosa.* Elsewhere at the 2-8 m depth on *Chaetomorpha melagonium, Cladophora,* and the stipe of *Laminaria longicruris* and *L. solidungula.* Rare.
Eastern distribution.
New records.
Hudson Strait: Westbourne Bay *2521.*
Hudson Bay: Rankin Inlet *74-253-17.*
Southwestern distribution.
New records.
Elu Inlet: unnamed island *8043.*
Coronation Gulf: Anchor Island *6972.*
Northwestern distribution.
New records.
Penny Strait: near Russell Strait *9736.*

Myrionema aecidioides (Rosenvinge) Sauvageau
Rosenvinge 1893, p. 894, fig. 27, as *Ectocarpus aecidioides;* 1898, p. 80, as *E. aecidioides;* Taylor 1957, p. 115, as *Streblonema aecidioides;* Lund 1959, p. 61, as *Entonema aecidioides;* Jaasund 1965, p. 47, fig. 14, as *E. aecidioides.*
Endophytic in the blades of *Laminaria* at the 8-15 m depth. Rare.
Eastern distribution.
Literature records.
Hudson Strait: Forbes Sound (Wilce 1959, as *Streblonema aecidioides*).
New records.
Hudson Bay: Munn Bay *74-254-2,* Rankin Inlet *74-252A-3.*

Myrionema strangulans Greville
Kjellman 1883, p. 255; Taylor 1957, p. 132, pl. 11, figs. 13-14; Jaasund 1965, p. 57, fig. 17; Loiseaux 1967, p. 547, figs. 8-11, pl. 2.
At the 18 m depth at Grey Goose Island.
Eastern distribution.
Literature records.
James Bay: Grey Goose Island (Howe 1927, *CANA 4222*).

Family Elachistaceae

Elachista fucicola (Velley) Areschoug
Kjellman 1883, p. 253, also as *E. lubrica;* Rosenvinge 1893, p. 878; 1898, p. 74; Waern 1952, p. 153; Taylor 1957, p. 140, pl. 10, figs. 1-3, also as *E. lubrica;* Lund 1959, p. 116; Jaasund 1960, p. 101, figs. 1-4, also as *Myriactula lubrica.*
At the 2-30 m depth epiphytic on various other algae and on one occasion (Qikirtaarjuk Islands) growing on a hydroid. The most common host was *Chaetomorpha melagonium,* followed by *Halosaccion ramentaceum, Rhodomela lycopodioides,* and *Punctaria glacialis.* Most of the specimens could be referred to *E. fucicola* f. *lubrica* (Ruprecht) Rosenvinge. Frequent in the southwest, occasional elsewhere.
Eastern distribution.
Literature records.
Jones Sound: Craig Harbour (Lund 1933).
Davis Strait: Cumberland Sound (Dickie 1867).
Hudson Bay: Long Island Sound (Howe 1927, *CANA 4237,*
James Bay: James Bay (Setchell and Collins 1908, as *E. lubrica*).
New records.
Jones Sound: Cape Skogn *9200,* near Cape Newman Smith *9238,* Boat Point *9176.*
Prince Regent Inlet: Creswell Bay *8883.*
Bellot Strait: Fox Islands *8816.*
Gulf of Boothia: Netsiksiuvik Inlet *8740.*
Hudson Strait: Westbourne Bay *2462.2.*
Repulse Bay: Talun Bay *74-256-9.*
Hudson Bay: between Otaska Harbour and Black Whale Harbour *CANA 4195.*
Southwestern distribution.
New records.
Simpson Strait: Eta Island *8677, 9036.*
Queen Maud Gulf: Royal Geographical Society Islands *8609,* Anderson Bay *8445,* Foggy Bay *8132,* near Minto Islands *7946.*
Dease Strait: Qikirtaarjuk Islands *7154.*
Melville Sound: Kuururjuak Point *8393,* Hurd Islands *8368.*

Coronation Gulf: Anchor Island *6959.*
Dolphin and Union Strait: Cockburn Point *8581.*
Amundsen Gulf: Gillet Bay *6799*, Police Point *4241, 6684.*
Northwestern distribution.
Literature records.
Crozier Channel: Manson Point (Lee 1966).
New records.
Wellington Channel: Snowblind Bay *9155.*
Barrow Strait: Assistance Bay *62-4001-4, 9506.*
Hecla and Griper Bay: Cape Fisher 3103.

Family Chordariaceae

Eudesme virescens (Carmichael) J. Agardh
Kjellman 1883, p. 251; Rosenvinge 1898, p. 58, as *Castagnea virescens;* Taylor 1957, p. 145, pl. 12, fig. 3; Lund 1959, p. 119, fig. 25.
On rocks at the 2-6 m depth. Rare.
Eastern distribution.
Literature records.
Hudson Strait: False River Bay and Koksoak River (Wilce 1959).
Hudson Bay: Long Island Sound (Howe 1927, as *Castagnea virescens, CANA 4192*).
Southwestern distribution.
New records.
Elu Inlet: unnamed island *8398.*
Melville Sound: Hurd Islands *8330.*

Chordaria flagelliformis (O. F. Müller) C. Agardh
Kjellman 1883, p. 249; Rosenvinge 1893, p. 854; 1898, p. 58; Taylor 1957, p. 148, pl. 12, fig. 6, pl. 14, fig. 4; Lund 1959, p. 121, figs. 26-27; Jaasund 1965, p. 67.
On rocks, bivalves, and other algae. In Hudson Bay from the low intertidal to a depth of 18 m. Elsewhere from depths of 2 to 12 m. Occasional.
Eastern distribution.
Literature records.
Hall Basin: Discovery Harbour (Dickie 1878).
Davis Strait: Cumberland Sound (Dickie 1867, Farlow 1879), Pangnirtung (Wheldon 1947).
Hudson Strait: Ungava Bay (Farlow 1886, Wilce 1959), Hudson Strait (Bell and MacFarlane 1933).
Hudson Bay: between Otaska Harbour and Black Whale Harbour, also Long Island Sound (Howe 1927, *CANA 4185* and *4153*).
James Bay: Old Factory Bay and Charlton Island (Howe 1927, *CANA 4154),* James Bay (Setchell and Collins 1908).
New records.
Bellot Strait: Fox Islands *8839.*
Hudson Strait: Westbourne Bay *2468,* Negus Bay *2557.*
Hudson Bay: Eskimo Point *74-250A-1,* Churchill *Crum 7675.*
Southwestern distribution.
New records.
Queen Maud Gulf: near Minto Islands *8012.*
Melville Sound: Hurd Islands *8365.*
Bathurst Inlet: Cape Croker *8499.*
Amundsen Gulf: Gillet Bay *6802,* Police Point *4309, 6652.*

Order Desmarestiales
Family Desmarestiaceae

Desmarestia aculeata (Linnaeus) Lamouroux
Kjellman 1883, p. 261; Rosenvinge 1893, p. 857; 1898, p. 59; Taylor 1957, p. 154, pl. 13, figs. 4-5, pl. 14, fig. 7; Lund 1959, p. 126.
Within the 1 and 25 m depth attached to rocks and also loose-lying on mud substrates. Frequent.
Eastern distribution.
Literature records.
Hall Basin: Discovery Harbour (Dickie 1878).
Smith Sound: 78-83° N. (Ashmead 1864), southern Pim Island (Rosenvinge 1926).
Jones Sound: Craig Harbour (Lund 1933, Bell and MacFarlane 1938), Harbour Fjord and Goose Fjord (Rosenvinge 1926).
Hell Gate: "Reindeer Bay" and Lands End (Rosenvinge 1926).
Baffin Bay: Bethune Inlet (Dickie 1871).
Lancaster Sound: Dundas Harbour (Bell and MacFarlane 1938, Wheldon 1947).
Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938).
Davis Strait: Exeter Sound (Lund 1933), Cumberland Sound (Dickie 1867).
Hudson Strait: Ungava Bay (Farlow 1886, Wheldon 1947, Wilce 1959), Lake Harbour (Bell and MacFarlane 1938).
Hudson Bay: South Bay (Wheldon 1947).
James Bay: James Bay (Setchell and Collins 1908).

New records.
Kane Basin: Norman Lockyer Island *9718,* Copes Bay *9702.*
Jones Sound: Cape Skogn *9204,* near Cape Newman Smith *9241.*
Prince Regent Inlet: Creswell Bay *8869.*
Gulf of Boothia: Netsiksiuvik Inlet *8747.*
Davis Strait: Frobisher Bay *CANA 16965.*
Hudson Strait: Westbourne Bay *2444,* Wakeham Bay *2620.*
Foxe Channel: Stanley Harbour *74-255A-9.*
Repulse Bay: Talun Bay *74-255B-10.*
Hudson Bay: Munn Bay *74-254-12,* Rankin Inlet *74-252A-7,* Eskimo Point *74-250-21,* Churchill *Crum 7593.*

Southwestern distribution.
Literature records.
Dolphin and Union Strait: Bernard Harbour and Cockburn Point (Collins 1927A, *CANA 4073* and *4075*).
New records.
Simpson Strait: Eta Island *8682.*
Queen Maud Gulf: Royal Geographical Society Islands *8606*, near Minto Islands *7975.*
Bathurst Inlet: Cape Croker *8490.*
Amundsen Gulf: Thesiger Bay *3371,* Sachs Harbour *3351*, Gillet Bay *6778,* Police Point *4231, 6651.*

Northwestern distribution.
Literature records.
Queens Channel: 76°29' N. 96°13' W. (Harvey 1858).
Crozier Channel: Manson Point (Lee 1966).
New records.
Norwegian Bay: near Lands End *9542.*
Belcher Channel: Cape Ursula *9730.*
Queens Channel: Milne Island *9086.*
Wellington Channel: Snowblind Bay *9141.*
Barrow Strait: near Cape Dungeness *9519,* Cunningham Inlet *9772,* Allison Inlet *9374.*
Byam Channel: near Richardson Point *DH13-5.*
Viscount Melville Sound: near Little Point *DH2S7-1.*
Kellet Strait: near Pedder Point *3088.3.*
Crozier Channel: Manson Point *3118.*
Beaufort Sea: Cape Prince Alfred *3069.1.*

Desmarestia viridis (O. F. Müller) Lamouroux
Kjellman 1883, p. 263, as *Dichloria viridis;* Rosenvinge 1893, p. 859, 1898, p. 60; Taylor 1957, p. 153, pl. 13, fig. 3; Lund 1959, p. 128.
On rocks at the 2-18 m depth. Occasional.

Eastern distribution.
Literature records.
Smith Sound: Pim Island (Rosenvinge 1926).
Hell Gate: "Excrement Bay" or Cross Bay, and "Reindeer Bay" (Rosenvinge 1926).
Davis Strait: Pangnirtung (Bell and MacFarlane 1938).
Hudson Strait: False River Bay and Koksoak River (Wilce 1959), Hudson Strait (Bell and MacFarlane 1933).
New records.
Robeson Channel: near Cape Rawson *9629.*
Hall Basin: Distant Cape *9660,* Discovery Harbour *9675.*
Kane Basin: Norman Lockyer Island *9719,* northern Pim Island *9580.*
Fram Sound: Rodberg Bay *9191.*
Gulf of Boothia: Victoria Harbour *8795.*
Hudson Strait: Westbourne Bay *2517.1,* Wakeham Bay *2645.1.*

Northwestern distribution.
Literature records.
Crozier Channel: Manson Point (Lee 1966).
New records.
Belcher Channel: Cape Ursula *9732.*
Queens Channel: Milne Island *9096.*
Wellington Channel: Snowblind Bay *9147.*
Barrow Strait: near Cape Dungeness *9518.*
McDougall Sound: Templeton Bay *9115.*
Byam Martin Channel: near Burnett Point *DH11S1-2.*
Byam Channel: *DH7-6.*
Wilkins Strait, south of: Brock Island *3164.*

Order Dictyosiphonales
Family Striariaceae

Isthmoplea sphaerophora (Carmichael) Kjellman
Kjellman 1883, p. 276; Rosenvinge 1893, p. 881; 1898, p. 75; Jónsson 1903a, p. 162, figs. 18-19; Taylor 1957, p. 156, pl. 9, figs. 4-5; Lund 1959, p. 39.

Eastern distribution.
Literature records.
Hudson Strait: Forbes Sound, False River Bay, and Koksoak River (Wilce 1959).

Stictyosiphon tortilis (Ruprecht) Reinke

Kjellman 1883, p. 264, pl. 26, fig. 17, as *Phloeospora pumila, P. subarticulata,* and *P. tortilis;* Rosenvinge 1893, p. 868; 1898, p. 70; Waern 1952, p. 155, fig. 70; Taylor 1957, p. 158; Naylor 1958, p. 8, figs. 1A-B, 2B, 2F, 3A-B; Lund 1959, p. 130.

At the 4-20 m depth as loose-lying populations or on rocks, *Laminaria* haptera, and *Fucus distichus*. Also intertidal at Westbourne Bay and Police Point. Frequent.

Eastern distribution.

Literature records.

Smith Sound: Pim Island (Rosenvinge 1926).

Jones Sound: Craig Harbour (Lund 1933), Fram Fjord and Harbour Fjord (Rosenvinge 1926).

Davis Strait: Cumberland Sound (Farlow 1879, 1886, as *Phloeospora tortilis*).

Hudson Strait: Forbes Sound, False River Bay, and Koksoak River (Wilce 1959).

Hudson Bay: Long Island Sound (Howe 1927, *CANA 4201*).

James Bay: Grey Goose Island and Charlton Island (Howe 1927, *CANA 4183*).

New records.

Jones Sound: Cape Skogn *9226.*

Prince Regent Inlet: Creswell Bay *8870.*

Eclipse Sound: near Pond Inlet *2682.4.*

Hudson Strait: Westbourne Bay *2450,* Wakeham Bay *2661.*

Foxe Channel: Stanley Harbour *74-255A-12.*

Southwestern distribution.

New records.

St. Roch Basin: Peel Inlet *8983.*

Rasmussen Basin: Peterson Bay *74-262B-18.*

Simpson Strait: Eta Island *8696, 9028.*

Victoria Strait: Victory Point *8961.*

Queen Maud Gulf: Royal Geographical Society Islands *8613,* Enterprise Point *7931,* Anderson Bay *8189, 8473,* Foggy Bay *8098,* near Minto Island *8007.*

Dease Strait: Starvation Cove *7251,* Qikirtaarjuk Islands *7139,* near Duncan Island *7216.*

Elu Inlet: unnamed island *8047.*

Melville Sound: Kuururjuak Point *8401,* Hurd Islands *8354.*

Bathurst Inlet: Cape Croker *8491,* Buchan Bay *8540.*

Coronation Gulf: Anchor Island *6944.*

Dolphin and Union Strait: Bernard Harbour *6833,* Cockburn Point *8579.*

Amundsen Gulf: De Salis Bay *4580,* Thesiger Bay *3375,* Sachs Harbour *3341.1,* Duck Hawk Bluff *4619,* Pearce Point *4490,* Gillet Bay *6791,* Police Point *4390, 6681,* Booth Island *6574.*

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966).

New records.

Barrow Strait: Radstock Bay *9318,* Allison Inlet *9373.*

McDougall Sound: Templeton Bay *9117,* Brooman Point *9261.*

Byam Channel: near Robertson Point *DH7-16, DH15-10.*

Hecla and Griper Bay: Cape Fisher *3107.3*

Kellett Strait: near Pedder Point *3124.*

Crozier Channel: Manson Point *3139.*

Beaufort Sea: Cape Prince Alfred *3064.1.*

Family Punctariaceae

Litosiphon filiformis (Reinke) Batters

Rosenvinge 1893, p. 869, as *Pogotrichum filiforme* var. *penicilliforme;* Jónsson 1903a, p. 162; Taylor 1957, p. 162; Lund 1959, p. 150, fig. 33; Jaasund 1965, p. 85, figs. 24-25.

Epiphytic on blades of *Laminaria*.

Eastern distribution.

Literature records.

Cardigan Strait: Devil Island (Rosenvinge 1926).

Hudson Strait: Port Harvey and Forbes Sound (Wilce 1959).

Desmotrichum undulatum (J. Agardh) Reinke

Taylor 1957, p. 164, pl. 15, fig. 6, pl. 16, figs. 1-2, also as *D. balticum;* Jaasund 1957, p. 216, fig. 6; 1959, p. 87, fig. 26.

At the 2-15 m depth on rocks and other algae. At depths above 8-9 m the most common host was *Fucus distichus.* Other hosts at that depth and deeper were *Chaetomorpha melagonium, Stictyosiphon tortilis, Rhodymenia palmata,* and *Rhodomela lycopodioides.* Rare in the east, frequent in the southwest.

Eastern distribution.

Literature records.

James Bay: Charlton Island (Howe 1927, as *Desmotrichum balticum, CANA 4184).*

New records.
Hudson Bay: Rankin Inlet *74-253A-3.*
Southwestern distribution.
New records.
Simpson Strait: Eta Island *8666, 9013.*
Queen Maud Gulf: Enterprise Point *7912,* Foggy Bay *8097,* near Minto Islands *8020.*
Dease Strait: Starvation Cove *7266,* Qikirtaarjuk Islands *7159,* near Duncan Island *7217.*
Melville Sound: Hurd Islands *8372.*
Coronation Gulf: Anchor Island *6947.*
Dolphin and Union Strait: Bernard Harbour *6849,* Cockburn Point *8580.*
Amundsen Gulf: De Salis Bay *4568,* Sachs Harbour *4649,* Police Point *4257,* Booth Island *6579.*

Punctaria glacialis Rosenvinge
Rosenvinge 1910, p. 118, figs. 6-7; Lund 1959, p. 135.
Within the 3 and 5 m depth on boulders and cobbles, *Fucus distichus*, and possibly (at Sachs Harbour) as loose-lying populations. Occasional.
Eastern distribution.
New records.
Hall Basin: Discovery Harbour *9661.*
Hudson Bay: Munn Bay *74-254-6.*
Southwestern distribution.
New records.
Rasmussen Basin: Peterson Bay *74-262-1.*
Simpson Strait: Eta Island *8676, 9033.*
Victoria Strait: Victory Point *8959.*
Queen Maud Gulf: Royal Geographical Society Islands *8627,* Anderson Bay *8176, 8441,* Foggy Bay *8074,* near Minto Islands *7941.*
Dease Strait: Starvation Cove *7245.*
Prince of Wales Strait: Princess Royal Islands *9494.*
Amundsen Gulf: Sachs Harbour *3357,* Booth Island *6535.*

Punctaria plantaginea (Roth) Greville
Kjellman 1883, p. 260; Rosenvinge 1893, p. 871; 1898, p. 71; Taylor 1957, p. 166, pl. 15, fig. 4, pl. 16, fig. 4; Lund 1959, p. 133, fig. 28.
On boulders and cobbles at the 3-9 m depth. Rare.
Eastern distribution.
Literature records.
Davis Strait: Cumberland Sound (Dickie 1867).
Southwestern distribution.
New records.
Dease Strait: Starvation Cove *7259.*
Amundsen Gulf: Gillet Bay *6807.*

Petalonia fascia (O. F. Müller) Kuntze
Kjellman 1883, p. 257, as *Ilea fascia;* Rosenvinge 1893, p. 862, as *Phyllitis fascia;* Taylor 1957, p. 167, pl. 14, fig. 5, pl. 15, fig. 3.
At the 5-18 m depth in James Bay.
Eastern distribution.
Literature records.
Smith Sound: 78-82° N. (Ashmead 1864, as *Laminaria fascia*).
Davis Strait: Cumberland Sound (Dickie 1867, as *L. fascia*).
Hudson Strait: Hudson Strait (Bell and MacFarlane 1933, as *Ilea fascia*); Forbes Sound, False River Bay, and Koksoak River (Wilce 1959).
Hudson Bay: between Otaska Harbour and Black Whale Harbour, and Long Island Sound (Howe 1927).
James Bay: Grey Goose Island, Old Factory Bay, and Charlton Island (Howe 1927, *CANA 4219*).
Northwestern distribution.
Literature records.
Barrow Strait: Union Bay (Dickie 1852, as *L. fascia*).

Scytosiphon lomentaria (Lyngbye) C. Agardh
Kjellman 1883, p. 258; Rosenvinge 1893, p. 863; 1898, p. 62; Taylor 1957, p. 168, pl. 15, fig. 2, pl. 16, fig. 3; Lund 1959, p. 103, fig. 20.
Eastern distribution.
Literature records.
Davis Strait: Cumberland Sound (Dickie 1867, as *Chorda lomentaria*).
Hudson Strait: Port Harvey, Forbes Sound, False River Bay, and Koksoak River (Wilce 1959).

Asperococcus echinatus (Mertens) Greville
Kjellman 1883, p. 247; Taylor 1957, p. 169, pl. 15, fig. 7, pl. 16, figs. 5-6.
Intertidal at Pangnirtung and Negus Bay.
Eastern distribution.
Literature records.
Davis Strait: Pangnirtung (Wheldon 1947).
Hudson Strait: Negus Bay (Wheldon 1947).

Omphalophyllum ulvaceum Rosenvinge
Rosenvinge 1893, p. 872, fig. 19, pl. 2, figs. 1-2; 1898, p. 73; Taylor 1957, p. 171; Lund 1959, p. 137, fig. 29.

Loose-lying, dense populations at the 5-13 m depth. Occasional.

Northwestern distribution.

Literature records.

Norwegian Bay: near Lands End (Rosenvinge 1926).

New records.

Byam Channel: near Robertson Point *DH7-12.*

Wilkins Strait, south of: Brock Island *3157.1.*

Kellett Strait: near Pedder Point *3091.*

Crozier Channel: Manson Point *3128.*

Beaufort Sea: Cape Prince Alfred *3075.1.*

Family Dictyosiphonaceae

Coilodesme bulligera Strömfelt

Rosenvinge 1893, p. 862; 1898, p. 61, fig. 13; Jónsson 1903a, p. 168.

Eastern distribution.

Literature records.

Hudson Strait: Port Harvey (Wilce 1959).

Dictyosiphon foeniculaceus (Hudson) Greville

Kjellman 1883, p. 268, also as *D. hippuroides* and *D. hispidus;* Rosenvinge 1893, p. 859, also as *D. hippuroides* and *D. hispidus;* 1898, p. 60; Waern 1952, p. 162; Taylor 1957, p. 172, pl. 12, fig. 4, pl. 14, fig. 2; Lund 1959, p. 152.

Attached to rocks and possibly as loose-lying populations within the 2 and 18 m depth. At some localities it also grew on *Chordaria flagelliformis, Punctaria glacialis, Stictyosiphon tortilis,* and *Fucus distichus.* Specimens from Starvation Cove and Police Point could be referred to f. *flaccidus* Areschoug; those from Fox Islands, f. *hispidus* Kjellman. Occasional.

Eastern distribution.

Literature records.

Kennedy Channel: Rawlings Bay (Dickie 1878).

Smith Sound: Pim Island (Rosenvinge 1926, as f. *flaccidus*).

Jones Sound: Craig Harbour (Lund 1933).

Baffin Bay: Bethune Bay (Dickie 1871).

Davis Strait: Cumberland Sound (Dickie 1867, Farlow 1879).

Hudson Strait: Ungava Bay (Farlow 1886), Forbes Sound (Wheldon 1947, Wilce 1959), False River Bay and Koksoak River (Wilce 1959), Hudson Strait (Bell and MacFarlane 1933).

Hudson Bay: Hudson Bay (Bell and MacFarlane 1933).

James Bay: Grey Goose Island and Charlton Island (Howe 1927, *CANA 4243* and *4244*).

New records.

Adams Sound: Arctic Bay *2731.2.*

Bellot Strait: Fox Islands *8842.*

Gulf of Boothia: Victoria Harbour *8796.*

Eclipse Sound: near Pond Inlet *2683.*

Hudson Strait: Westbourne Bay *2491,* Negus Bay *2565,* Wakeham Bay *2647.*

Foxe Channel: Stanley Harbour *74-255A-10.*

Hudson Bay: Rankin Inlet *74-252A-8.*

Southwestern distribution.

New records.

Simpson Strait: M'Clintock Bay *74-264-4.*

Queen Maud Gulf: Anderson Bay *8178, 8426,* near Minto Islands *8022.*

Dease Strait: Starvation Cove *7262.*

Elu Inlet: unnamed island *8051.*

Melville Sound: Kuururjuak Point *8395,* Hurd Islands *8357.*

Dolphin and Union Strait: Bernard Harbour *6866.*

Amundsen Gulf: Sachs Harbour *4647,* Police Point *4279.*

Order Laminariales
Family Chordaceae

Chorda filum (Linnaeus) Lamouroux

Kjellman 1883, p. 245, pl. 26, fig. 16; Rosenvinge 1893, p. 853; Waern 1952, p. 164; Taylor 1957, p. 176, pl. 14, fig. 3, pl. 15, fig. 1; Lund 1959, p. 155.

On rocks and bivalves at depths of 2-9 m. Occasional.

Eastern distribution.

Literature records.

Hudson Strait: Ungava Bay (Farlow 1886).

Hudson Bay: Long Island Sound (Howe 1927a, *CANA 4186*).

James Bay: James Bay (Setchell and Gardner 1908).

Southwestern distribution.

New records.

Melville Sound: Kuururjuak Point *8383,* Hurd Islands *8326.*

Bathurst Inlet: Cape Croker *8485,* Buchan Bay *8534.*

Coronation Gulf: Anchor Island *7012.*

Chorda tomentosa Lyngbye

Kjellman 1883, p. 246; Rosenvinge 1893,

p. 854; Taylor 1957, p. 175; Jaasund 1957, p. 212, as *Halosiphon tomentosa;* Lund 1959, p. 156.

On rocks, *Fucus*, and bivalves. At the 15 m depth at Eta Island, 2-9 m elsewhere. Occasional.

Eastern distribution.

Literature records.

Hudson Strait: False River Bay and Koksoak River (Wilce 1959).

Hudson Bay: between Otaska Harbour and Black Whale Harbour (Howe 1927, *CANA 4158*).

Southwestern distribution.

New records.

Simpson Strait: Eta Island *8684, 9014.*

Dease Strait: Starvation Cove *7279.*

Melville Sound: Kuururjuak Point *8384,* Hurd Islands *8325.*

Amundsen Gulf: Gillet Bay *6806.*

Family Laminariaceae

Saccorhiza dermatodea (De la Pylaie) J. Agardh

Kjellman 1883, p. 223, pl. 24, pl. 25, figs. 1-6, as *Phyllaria dermatodea* and *P. Lorea;* Rosenvinge 1893, p. 850; 1898, p. 57; Taylor 1957, pl. 22, fig. 2; Lund 1959, p. 157.

Eastern distribution.

Literature records.

Jones Sound: "Jammer Bay" or Bay of Woe (Rosenvinge 1926).

Hudson Strait: Port Harvey, Fox Harbour, and Forbes Sound (Wilce 1959).

Laminaria agardhii Kjellman

Kjellman 1877, p. 18, pl. 1, figs. 2-3; 1883, p. 234; Taylor 1957, p. 179, pl. 15, fig. 2.

Attached to rocks at depths of 13 m and shallower. Rare.

Eastern distribution.

Literature records.

Hudson Strait: Hudson Strait (Bell and MacFarlane 1933).

Hudson Bay: Hudson Bay (Bell and MacFarlane 1933).

New records.

Foxe Channel: Stanley Harbour *74-255A-5.*

Southwestern distribution.

New records.

Amundsen Gulf: Booth Island *6533.*

Laminaria digitata (Hudson) Lamouroux

Kjellman 1883, p. 240; Rosenvinge 1893, p. 841; 1898, p. 51; Taylor 1957, p. 184, pl. 18, fig. 1; Lund 1959, p. 164.

On rocks at the 4-8 m depth. Rare.

Eastern distribution.

Literature records.

Hudson Strait: Cape Wolstenholme (Bell and MacFarlane 1938).

Hudson Bay: Hudson Bay (Bell and MacFarlane 1933).

New records.

Hudson Strait: Westbourne Bay *2456.*

Hudson Bay: Churchill *Crum 7658.*

Laminaria groenlandica Rosenvinge

Kjellman 1883, p. 228, as *L. cuneifolia;* Rosenvinge 1893, p. 847, also as *L. cuneifolia;* 1898, p. 53; Taylor 1957, p. 179, also as *L. cuneifolia;* Lund 1959, p. 163; Wilce 1960, p. 203; 1965, p. 247, fig. 1; Druehl 1968, p. 542, figs. 8, 11-14, 23-25, 35-38.

At the 3-30 m depth attached to rocks (including pebbles) and shells. Frequent.

Eastern distribution.

Literature records.

Smith Sound: Pim Island* (Rosenvinge 1926).

Jones Sound: Harbour Fjord, Goose Fjord, Walrus Fjord, and "Jammer Bay" or Bay of Woe (Rosenvinge 1926).

Hudson Strait: Port Harvey (Wilce 1959), Forbes Sound to Koksoak River (Wilce 1959, also as *Laminaria cuneifolia*).

New records.

Hall Basin: Discovery Harbour *9664.*

Kane Basin: Norman Lockyer Island *9717,* Copes Bay *9693,* northern Pim Island *9567, 9600.*

Jones Sound: Cape Skogn *9194,* near Cape Newman Smith *9228,* Boat Point *9165.*

Fram Sound: Rodberg Bay *9182.*

Bellot Strait: Fox Islands *8813,* near Brands Island *74-261-6.*

Davis Strait: Frobisher Bay *CANA 16972.*

Hudson Strait: Westbourne Bay *2448,* Wakeham Bay *2653.*

*Southwestern distribution.**

New records.

Victoria Strait: Victory Point *8652.*

---

* Rosenvinge based this record on the notation H.G. Simmons had made in his diary as having seen *Laminaria saccharina.*

---

* Our specimens (*CANA 4057, 4058, 4059, 4068*) of the Dolphin and Union Strait material cited by Collins (1927a) as *Laminaria groenlandica* are referable to *L. saccharina.*

Northwestern distribution.
Literature records.
Crozier Channel: Manson Point (Lee 1966, as *L. saccharina* var. *groenlandica*).
New records.
Norwegian Bay: near Lands End *9539.*
Penny Strait: near Russel Island *9738.*
Queens Channel: near Cape Becher *9748.*
Wellington Channel: Emery Bay *9121,* Snowblind Bay *9134.*
Barrow Strait: near Cape Dungeness *9516,* Assistance Bay *9503,* Allison Inlet *9356.*
McDougall Sound: Templeton Bay *9108,* Brooman Point *9245,* Freemans Cove *9305.*
Austin Channel: Hooker Bay *9333.*
Byam Martin Channel: Maori Point *9352.*
Viscount Melville Sound: near Little Point *DH2S2-3, DH2S7-2.*
Crozier Channel: Manson Point *3123,* Mould Bay *3076.*
M'Clure Strait: Cape Mecham *3153.*

Laminaria longicruris De la Pylaie
Kjellman 1883, p. 232; Rosenvinge 1893, p. 845; 1898, p. 52; Taylor 1957, p. 181, pl. 20, figs. 1-2; Wilce 1965, p. 247, fig. 1.
On rocks within the 3 and 14 m depth. Occasional.
Eastern distribution.
Literature records.
Smith Sound: 78-82° N. (Ashmead 1864), Pim Island* (Rosenvinge 1926).
Davis Strait: Exeter Sound (Lund 1933), Cumberland Sound (Dickie 1867).
Hudson Strait: Ungava Bay (Farlow 1886, Wilce 1959).
Hudson Bay: Hudson Bay (Bell and MacFarlane 1933).
New records.
Prince Regent Inlet: Creswell Bay *8894.*
Bellot Strait: Fox Islands *8850.*
Davis Strait: Frobisher Bay *CANA 16962.*
Hudson Strait: Westbourne Bay *2443,* Negus Bay *2478.*
Foxe Channel: Stanley Harbour *74-255A-1.*
Hudson Bay: Munn Bay *74-254-1,* Ivugivik *2588,* Eskimo Point *74-250-42.*

Laminaria nigripes J. Agardh
Kjellman 1883, p. 236, also as *L. atrofulva;* Rosenvinge 1893, p. 842; Taylor 1957, p. 182; Lund 1959, p. 164.
On rocks at the 4-8 m depth. Rare.
Eastern distribution.
*Literature records.**
Hudson Strait: Port Harvey and Forbes Sound to Koksoak River (Wilce 1959).
New records.
Hudson Strait: Westbourne Bay *2504.*

Laminaria saccharina (Linnaeus) Lamouroux
Kjellman 1883, p. 229, pl. 25, fig. 7; Rosenvinge 1898, p. 53, fig. 12; Taylor 1957, p. 180; Lund 1959, p. 159, fig. 34; Wilce 1965, p. 247, fig. 1; Druehl 1968, p. 544, figs. 15-16, 26, 39.
At depths of 3-19 m, attached to rocks (including pebbles) and shells. Frequent.
Eastern distribution.
Literature records.
Smith Sound: 78-82° N. (Ashmead 1864, also as *Laminaria phyllitis*).
Bellot Strait: Port Kennedy (Dickie 1861).
Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938, as *L. phyllitis*; Wheldon 1947).
Davis Strait: Cumberland Sound (Dickie 1867), Pangnirtung (Wheldon 1947).
Hudson Strait: Forbes Sound (Wheldon 1947, Wilce 1959), False River Bay and Koksoak River (Wilce 1959), Hudson Strait (Bell and MacFarlane 1933, as *L. phyllitis*).
James Bay: Charlton Island (Bell and MacFarlane 1938, as *L. phyllitis*).
New records.
Robeson Channel: near Cape Rawson *9625.*
Hall Basin: Distant Cape *9655.*
Gulf of Boothia: Victoria Harbour *8781,* Netsiksiuvik Inlet *8731,* Pelly Bay *74-257-1.*
Eclipse Sound: near Pond Inlet *2703.*
Hudson Strait: Westbourne Bay *2447,* Wakeham Bay *2633.*
Repulse Bay: Talun Bay *74-256-1.*
Hudson Bay: Rankin Inlet *74-251-1,* Eskimo Point *74-250-32.*
Southwestern distribution.
New records.
St. Roch Basin: Peel Inlet *8971.*

* Specimens were not collected but Simmons (see footnote to *Laminaria groenlandica*) had noted in his diary the occurrence of the species. According to Rosenvinge (1926), Simmons also mentioned its occurrence in Jones Sound, "near Harbour Fjord, frozen in sea ice".

* Rosenvinge (1926), with only fragments of specimens available, was uncertain of the presence of *Laminaria nigripes* in Smith Sound, Jones Sound, and Cardigan Strait.

Rasmussen Basin: Peterson Bay *74-262C-3.*
Simpson Strait: Eta Island *8994.*
Victoria Strait: Victory Point *8657.*
Queen Maud Gulf: Royal Geographical Society Islands *8602,* Anderson Bay *8165, 8416, 74-269-1,* Foggy Bay *8056.*
Dease Strait: Starvation Cove *7278.*
Dolphin and Union Strait: Bernard Harbour *CANA 4068,* Cockburn Point *8549, CANA 4058,* Cape Young *CANA 4057.*
Amundsen Gulf: Sachs Harbour *3352,* Gillet Bay *6734,* Police Point *4306, 6643,* near Point Stivens *63-008.*

Northwestern distribution.

Literature records.

Barrow Strait: Assistance Bay (Dickie 1852).

New records.

Belcher Channel: Cape Ursula *9727.*
Queens Channel: Milne Island *9084.*
Barrow Strait: Cunningham Inlet *9773.*
Austin Channel: near Langley Point *9348.*
Byam Channel: near Richardson Point *DH13-1,* near Robertson Point *DH7-1.*
Viscount Melville Sound: Nelson Griffiths Point *DH8-1,* near Little Point *DH2S2-5, DH2S9-1.*
Kellett Strait: near Pedder Point *3090.*
Crozier Channel: Manson Point *3142,* Mould Bay *3080.*
Beaufort Sea: Cape Prince Alfred *3072.1.*

Laminaria solidungula J. Agardh

Kjellman 1883, p. 227; Rosenvinge 1893, p. 850; 1898, p. 57; Taylor 1957, p. 182; Lund 1959, p. 158.

At the 3-30 m depth on rocks and shells. Frequent. Some of the specimens from Eskimo Point and Cockburn Point had mucilage ducts only in the blade. Specimens from Foggy Bay and near Point Stivens were without mucilage ducts.

Eastern distribution.

Literature records.

Smith Sound: Pim Island* (Rosenvinge 1926).
Jones Sound: Goose Fjord and Cape Vera (Rosenvinge 1926).
Fram Sound: Norfolk Inlet (Rosenvinge 1926).
Hell Gate: "Excrement Bay" or Bay of Woe, "Reindeer Cove", "Hare Point", and Lands End (Rosenvinge 1926).
Hudson Strait: Forbes Sound to Fort Chimo (Wilce 1959).

New records.

Robeson Channel: near Cape Rawson *9622.*
Hall Basin: Distant Cape *9652,* Discovery Harbour *9663.*
Kane Basin: Norman Lockyer Island *9714,* Copes Bay *9692,* northern Pim Island *9578, 9601.*
Jones Sound: Cape Skogn *9193,* near Cape Newman Smith *9227,* Boat Point *9164.*
Fram Sound: Rodberg Bay *9183.*
Prince Regent Inlet: Creswell Bay *8859.*
Bellot Strait: Fox Islands *8849,* near Brands Island *74-261-5.*
Gulf of Boothia: Victoria Harbour *8756,* Netsiksiuvik Inlet *8743.*
Hudson Strait: Westbourne Bay *2430,* Wakeham Bay *2662.*
Repulse Bay: Talun Bay *74-256-2.*
Hudson Bay: Rankin Inlet *74-252A-1,* Eskimo Point *74-250-30.*

Southwestern distribution.

New records.

Rasmussen Basin: Peterson Bay *74-262C-1.*
Simpson Strait: Eta Island *8993.*
Queen Maud Gulf: Anderson Bay *8164, 8414,* Foggy Bay *8058,* near Minto Islands *7970.*
Dease Strait: between Starvation Cove and Long Point *66-1012,* Wellington Bay *66-1004.*
Dolphin and Union Strait: Cockburn Point *8547.*
Amundsen Gulf: Gillet Bay *6725,* Police Point *6633,* near Point Stivens *63-009.*

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966).

New records.

Nanson Sound: near Butter Porridge Point *9551, 9554.*
Belcher Channel: Cape Ursula *9724.*
Penny Strait: near Russel Island *9733, Hungry Bay 62-4304-1.*
Queens Channel: Milne Island *9081.*
Wellington Channel: Emery Bay *9125,* Snowblind Bay *9159.*
Barrow Strait: near Cape Dungeness *9513,* Allison Inlet *9355.*

* As with *Laminaria groenlandica* and *L. longicruris*, this record was based solely on the field notes of Simmons.

McDougall Sound: Templeton Bay *9113,* Freemans Cove *9306.*
Austin Channel: Hooker Bay *9334.*
Byam Martin Channel: Maori Point *9354.*
Byam Channel: near Robertson Point *DH7-2, DH15-2,* near Kay Point *DH5-2.*
Viscount Melville Sound: Nelson Griffiths Point *DH8-4.*
Wilkins Strait, south of: Brock Island *3175.*
Crozier Channel: Manson Point *3122.*

Agarum cribrosum Bory

Kjellman 1883, p. 222, as *A. turneri;* Rosenvinge 1893, p. 841, as *A. turneri;* 1898, p. 50, as *A. turneri;* Taylor 1957, p. 185, pl. 22, fig. 1.

On rocks at depths of 5-35 m. Occasional.

Eastern distribution.

Literature records.

Smith Sound: Fram Haven (Rosenvinge 1926, as *Agarum turneri*).
Jones Sound: Harbour Fjord, Goose Fjord, and "Jammer Bay" or Bay of Woe (Rosenvinge 1926, as *A. turneri*).
Hell Gate: "Reindeer Bay" and Lands End (Rosenvinge 1926, as *A. turneri*).
Lancaster Sound: Dundas Harbour (Bell and MacFarlane 1938, Wheldon 1947; both as *A. turneri*).
Bellot Strait: Port Kennedy (Dickie 1861, as *A. turneri*).
Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938, Wheldon 1947; both as *A. turneri*).
Davis Strait: Exeter Sound (Lund 1933, as *A. turneri*), Cumberland Sound (Dickie 1867, as *A. turneri*).
Hudson Strait: Ungava Bay (Farlow 1886, as *A. turneri*; Wilce 1959), Cape Wolstenholme (Bell and MacFarlane 1938, as *A. turneri*), Hudson Strait (Bell and MacFarlane 1933, as *A. turneri*).
Hudson Bay: Depot Island (Setchell and Collins 1908, as *A. turneri*), Churchill (Bell and MacFarlane 1938, as *A. turneri*), Hudson Bay (Bell and MacFarlane 1933, as *A. turneri*).
James Bay: James Bay (Setchell and Collins 1908, as *A. turneri*).

New records.

Kane Basin: Copes Bay *9704,* northern Pim Island *9595.*
Jones Sound: Cape Skogn *9195,* near Cape Newman Smith *9231.*
Admiralty Inlet: Arctic Bay *2726.*
Prince Regent Inlet: Creswell Bay *8862.*
Bellot Strait: Fox Islands *8823.*
Gulf of Boothia: Victoria Harbour *8783,* Netsiksiuvik Inlet *8716.*
Davis Strait: Frobisher Bay *CANA 16975.*
Hudson Strait: Westbourne Bay *2459,* Negus Bay *2551,* Wakeham Bay *2654,* Ivugivik *2602.*
Repulse Bay: Talun Bay *74-256-3.*
Hudson Bay: Munn Bay *74-254-5,* Chesterfield Inlet *Savile and Watts 928,* Eskimo Point *74-250-4,* Churchill *Crum 7665.*

Northwestern distribution.

Literature records.

Barrow Strait: Union Bay and Assistance Bay (Dickie 1852, as *A. turneri*).

New records.

Wellington Channel: Porden Point *9532,* Emery Bay *9123.*
Barrow Strait: Rigby Bay *9325.*

Family Alariaceae

Alaria esculenta (Linnaeus) Greville

Kjellman 1883, p. 212, pls. 20-22, also as *A. dolichorhachis,* and *A. oblonga;* Taylor 1957, p. 186, pl. 21, fig. 2, also as *A. musaefolia;* Lund 1959, p. 168; Widdowson 1971, p. 29, fig. 12.

At the 3-20 m depth on rocks and shells. Occasional.

Eastern distribution.

Literature records.

Smith Sound: 78-82° N. (Ashmead 1864).
Lancaster Sound: Dundas Harbour (Wheldon 1947).
Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938, Wheldon 1947).
Hudson Strait: Forbes Sound (Wheldon 1947), Wakeham Bay and Cape Wolstenholme (Bell and MacFarlane 1938), Hudson Strait (Bell and MacFarlane 1933).
Hudson Bay: South Bay (Wheldon 1947), Hudson Bay (Bell and MacFarlane 1933).

New records.

Jones Sound: Cape Skogn *9203,* near Cape Newman Smith *9232.*
Fram Sound: Rodberg Bay *9185.*
Prince Regent Inlet: Creswell Bay *8901.*
Bellot Strait: Fox Islands *8824,* near Brands Islands *74-261-7.*
Gulf of Boothia: Victoria Harbour *8759.*
Hudson Strait: Negus Bay *2596,* Wakeham Bay *2648.*

Southwestern distribution.

New records.
Victoria Strait: Victory Point *8654.*
Dolphin and Union Strait: Cockburn Point *CANA 4063.*
Amundsen Gulf: Gillet Bay *6740,* Police Point *6631.*
Northwestern distribution.
Literature records.
Penny Strait: Northumberland Sound (Harvey 1858, as *Alaria pylaii* according to Widdowson 1971).
New records.
Belcher Channel: Cape Ursula *9729.*
Penny Strait: near Russell Island *9739.*
Queens Channel: near Cape Becher *9752,* Milne Island *9085.*
Wellington Channel: Emery Bay *9131,* Snowblind Bay *9138.*
Barrow Strait: near Cape Dungeness *9514,* Cunningham Inlet *9768.*

Alaria grandifolia J. Agardh
Kjellman 1883, p. 217; Taylor 1955, p. 187; Lund 1959, p. 166, as *A. pylaii* f. *grandifolia;* Widdowson 1971, p. 33, fig. 14.
Within the 3 and 25 m depth on rocks. Rare.
Eastern distribution.
New records.
Gulf of Boothia: Netsiksiuvik Inlet *8742.*
Northwestern distribution.
New records.
Barrow Strait: Cunningham Inlet *9769.*

Alaria pylaii (Bory) Greville
Kjellman 1883, p. 213; Rosenvinge 1893, p. 838; 1898, p. 48; Taylor 1955, p. 188; Lund 1959, p. 166, in part; Widdowson 1971, p. 41, fig. 20.
Within the 2 and 20 m depth on rocks. Rare.
Eastern distribution.*
Literature records.
Jones Sound: Craig Harbour (Lund 1933).
New records.
Wellington Channel: Emery Bay *9133.*

Order Fucales
Family Fucaceae

Fucus distichus Linnaeus subsp. ***distichus***
Kjellman 1883, p. 210, pl. 19, fig. 3, also as *F. filiformis* and *F. linearis;* Rosenvinge 1893, p. 834, as *F. inflatus var. linearis;* 1898, p. 45, as *F. inflatus*, in part; Taylor 1957, p. 190, pl. 23, fig. 2, as *F. filiformis;* Powell 1957, p. 420, pl. 1, fig. 2; Lund 1959, p. 169, as *F. inflatus* f. *linearis.*
On rocks, intertidal in St. Roch Basin, within the 0 and 10 m depth elsewhere. Occasional.
Eastern distribution.
Literature records.
Jones Sound: Craig Harbour (Lund 1933, as *Fucus inflatus*).
Southwestern distribution.
Literature records.
Dolphin and Union Strait: Cape Young (Collins 1927a, as *F. inflatus* f. *distichus, CANA 4066*).
New records.
St. Roch Basin: Peel Inlet *8977.*
Simpson Strait: M'Clintock Bay *74-264-5.*
Queen Maud Gulf: Royal Geographical Islands *8629,* Enterprise Point *7891,* Anderson Bay *8265, 8459,* Foggy Bay *8078,* near Minto Islands *8017.*
Coronation Gulf: Anchor Island *6913.*
Amundsen Gulf: De Salis Bay *4528,* Sachs Harbour *3334.*
Northwestern distribution.
New records.
Beaufort Sea: Cape Prince Alfred *3059.*

Fucus distichus subsp. ***anceps*** (Harvey and Ward) Powell
Powell 1957, p. 421, pl. 2, fig. 1.
Eastern distribution.
Literature records.
Hudson Strait: False River Bay and Koksoak River (Wilce 1959).

Fucus distichus subsp. ***edentatus*** (De la Pylaie) Powell
Kjellman 1883, p. 204, as *F. edentatus;* Rosenvinge 1893, p. 834, as *F. inflatus* var. *edentatus;* Taylor 1957, p. 191, pl. 23, fig. 3, as *F. edentatus;* Powell 1957, p. 424, pl. 2, fig. 2; Lund 1959, p. 169, as *F. inflatus* f. *edentatus.*
On rocks, intertidal in Hudson Strait and Hudson Bay, and at the 3-8 m depth in Amundsen Gulf.
Eastern distribution.
Literature records.
James Bay: James Bay (Setchell and Collins 1908, as *Fucus edentatus*).
New records.

* *The Alaria membranacea* (also known as *A. pylaii* f. *membranacea*) specimens reported by Collins (1927a) from the southwestern region in Dolphin and Union Strait (*CANA 4062* and *4063*) are of *A. esculenta.*

Hudson Strait: Sugluk Inlet *2611.*
Hudson Bay: Rankin Inlet *74-253A-1,* Great Whale River *Savile 397.*
James Bay: Moose River *Riley 129.*

Southwestern distribution.
New records.
Amundsen Gulf: Police Point *4371.*

Fucus distichus subsp. ***evanescens*** (C. Agardh) Powell

Kjellman 1883, p. 202, as *F. evanescens;* Rosenvinge 1893, p. 834, as *F. inflatus* var. *evanescens;* Taylor 1957, p. 193, pl. 23, fig. 4, pl. 24, fig. 2, as *F. evanescens;* Powell 1957, p. 426; Lund 1959, p. 169, as *F. inflatus* f. *evanescens.*

On rocks within the 0 and 10 m depth. Also on intertidal rocks in the eastern region (Kane Basin southward). Frequent.

Eastern distribution.
Literature records.
Smith Sound: Fram Haven and southern Pim Island (Rosenvinge 1926, as *Fucus inflatus* f. *evanescens),* 78-82° N. (Ashmead 1864, as *F. evanescens*).
Jones Sound: Craig Harbour (Bell and MacFarlane 1938, as *F. evanescens*), Harbour Fjord, Goose Fjord, and "Jammer Bay" or Bay of Woe (Rosenvinge 1926), as *F. inflatus* f. *evanescens*).
Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938, as *F. evanescens*).
Baffin Bay: Clyde (Bell and MacFarlane 1938, as *F. evanescens*).
Hudson Strait: Westbourne Bay (Bell and MacFarlane 1938, Wheldon 1947; both as *F. evanescens*), Wakeham Bay and Cape Wolstenholme (Bell and MacFarlane 1938, as *F. evanescens*), Hudson Strait (Bell and MacFarlane 1933, as *F. evanescens*).
Hudson Bay: Southampton Island (Bell and MacFarlane 1938, as *F. evanescens*), between Otaska Harbour and Black Whale Harbour, Long Island Sound (Howe 1927, as *F. evanescens, CANA 4229,* and *4231)* Depot Island (Setchell and Collins 1908, as *F. evanescens*), Churchill (Bell and MacFarlane 1938, as *F. evanescens*), Hudson Bay (Bell and MacFarlane 1933, as *F. evanescens*).
James Bay: Grey Goose Island and near Halfway Point (Howe 1927, as *F. evanescens, CANA 4232* and *4230*).

New records.
Kane Basin: Copes Bay *9690,* northern Pim Island *9557.*
Jones Sound: Cape Skogn *9205,* near Cape Newman Smith *9235,* Boat Point *9168.*
Adams Sound: Arctic Bay *2715.*
Prince Regent Inlet: Creswell Bay *8885.*
Eclipse Sound: near Pond Inlet *2698.*
Davis Strait: Frobisher Bay *CANA 16974.*
Hudson Strait: Westbourne Bay *2474, 2533,* Negus Bay *2558,* Wakeham Bay *2624, 2666.*
Foxe Channel: Stanley Harbour *74-255A-8.*
Repulse Bay: Talun Bay *74-256-4.*
Hudson Bay: Munn Bay *74-254-13,* Rankin Inlet *74-253A-2.*
James Bay: Moose River *CANA 18363,* Ekwan River *CANA 8771.*

Southwestern distribution.
New records.
St. Roch Basin: Peel Inlet *8966.*
Simpson Strait: Eta Island *9008.*
Victoria Strait: Victory Point *8950.*
Queen Maud Gulf: Royal Geographical Society Islands *8625,* Enterprise Point *7896,* Anderson Bay *8174, 8455,* near Minto Islands *7950.*
Dease Strait: Starvation Cove *7239,* near Duncan Island *7167.*
Melville Sound: Kuururjuak Point *8409,* Hurd Islands *8339.*
Bathurst Inlet: Cape Croker *8477.*
Dolphin and Union Strait: Bernard Harbour *6834,* Cockburn Point *8572.*
Amundsen Gulf: Pearce Point *4410,* Gillet Bay *6781,* Police Point *4285, 6656,* Booth Island *6621.*

Northwestern distribution.
New records.
Barrow Strait: Cunningham Inlet *9763.*

Fucus vesiculosus Linnaeus

Kjellman 1883, p. 198; Rosenvinge 1893, p. 833; Waern 1952, p. 166, fig. 75; Taylor 1957, p. 192, pl. 25, figs. 1-3; Lund 1959, p. 168.

Eastern distribution.
Literature records.
Smith Sound: 78-82° N. (Ashmead 1864).
Jones Sound: Craig Harbour (Wheldon 1947).
Eclipse Sound: Pond Inlet (Wheldon 1947).
Baffin Bay: Bethune Bay (Dickie 1871), Clyde (Wheldon 1947).
Davis Strait: Pangnirtung (Bell and Mac-

Farlane 1938), Cumberland Sound Dickie 1867).

Hudson Strait: Forbes Sound, Westbourne Bay, and Wakeham Bay (Wheldon 1947).

Hudson Bay: South Bay (Wheldon 1947).

Ascophyllum nodosum (Linnaeus) Le Jolis

Kjellman 1883, p. 194, as *Ozothallia nodosa*; Rosenvinge 1893; p. 832; Taylor 1957, p. 195, pl. 27, figs. 1-2; Lund 1959, p. 171.

Eastern distribution.

Literature records.

Davis Strait: Cumberland Sound (Dickie 1867, as *Fucus nodosus*).

Hudson Strait: Forbes Sound (Wheldon 1947, Wilce 1959), False River Bay (Wilce 1959).

DIVISION RHODOPHYTA
Class Rhodophyceae
Subclass Bangiophycidae

Order Bangiales
Family Bangiaceae

Erythrotrichia carnea (Dillwyn) J. Agardh

Kjellman 1883, p. 193, as *E. ceramicola;* Taylor 1957, p. 202, pl. 28, figs. 13-15.

At the 5-6 m depth.

Eastern distribution.

Literature records.

James Bay: Charlton Island (Howe 1927, *CANA 4234*).

Erythrocladia irregularis Rosenvinge

Rosenvinge 1909, p. 72, figs. 11-12; Zinova 1955, p. 47, fig. 39.

At depths somewhere between 2 and 9 m, epiphytic on the holdfast of a *Laminaria* at Ivugivik Harbour and on *Polysiphonia arctica* at Foggy Bay. Rare.

Eastern distribution.

New records.

Hudson Bay: Ivugivik Harbour *2594.2.*

Southwestern distribution.

New records.

Queen Maud Gulf: Foggy Bay *8119.*

Erythrocladia polystromatica P. Dangeard

Waern 1952, p. 180, figs. 77-78; Zinova 1955, p. 48, fig. 41.

Epiphytic on *Polysiphonia arctica* at a depth between 2 and 9 m. Rare.

Southwestern distribution.

New records.

Queen Maud Gulf: Foggy Bay *8122.*

Erythropeltis discigera var. ***flustrae*** Batters

Taylor 1957, p. 205, pl. 29, figs. 1-2.

On hydroids (e.g., *Eudendrium*) at depths of 7-15 m. Rare.

Northwestern distribution.

New records.

Viscount Melville Sound: near Little Point *DH2S7-8.*

Wilkins Strait, south of: Brock Island *3163.1.*

Porphyra miniata (C. Agardh) C. Agardh

Kjellman 1883, p. 188, pls. 17-18, as *Diploderma amplissimum, D. miniatum,* and *Porphyra abyssicola;* Rosenvinge 1893, p. 826, fig. 14; 1898, p. 44; Zinova 1955, p. 52, figs. 46-50, also as *P. abyssicola,* and *P. amplissima;* Taylor 1956, p. 207.

Subtidal.

*Eastern distribution.**

Literature records.

Hudson Strait: Ungava Bay (Farlow 1886), Forbes Sound and Koksoak River (Wilce 1959).

Porphyra purpurea (Roth) C. Agardh

Kjellman 1883, p. 190, as *P. laciniata* f. *typica;* Rosenvinge 1893, p. 830, as *P. umbilicalis,* in part; Zinova 1955, p. 51, as *P. laciniata;* Taylor 1957, p. 206, as *P. umbilicalis*, in part.

Subtidal.

*Eastern distribution.**

Literature records.

Hudson Strait: Wakeham Bay (Bell and MacFarlane 1938, as *Porphyra laciniata*).

Hudson Bay: Hudson Bay (Bell and MacFarlane 1933, as *P. laciniata*).

SUBCLASS FLORIDIOPHYCIDAE

Order Nemaliales
Family Acrochaetiaceae

Acrochaetium parvulum (Kylin) Hoyt

Rosenvinge 1893, p. 825, as *Chantransia microscopica;* 1898, p. 40, figs. 10-11; 1909, p. 93, figs. 24-26, as *C. hallandica* f. *parvula;* Lund 1959, p. 173, fig. 35.

---

* The *Conchocelis*-phase in the life cycle of *Porphyra* (and possibly *Bangia*, which occurs on the western side of Greenland) has been reported by Rosenvinge 1926 (as *C. rosea*) from Smith Sound in Rice Strait and Jones Sound in Harbour Fjord.

---

* See footnote to Porphyra miniata.

At Rankin Inlet intertidal on *Polysiphonia arctica*. Elsewhere at depths of 2-35 m on *Chaetomorpha melagonium, Cladophora, Acrosiphonia arcta, Pilayella littoralis, Sphacelaria plumosa, Stictyosiphon tortilis, Desmarestia aculeata, Dictyosiphon foeniculaceus, Polysiphonia arctica, Rhodomela lycopodioides,* and *Odonthalia floccosa.* Frequent in the southwest, occasional in the east.

Eastern distribution.

New records.

Prince Regent Inlet: Creswell Bay *8875.*

Hudson Bay: Munn Bay *74-255-13,* Rankin Inlet *74-253A-13,* Eskimo Point *74-250-11.*

Southwestern distribution.

New records.

St. Roch Basin: Peel Inlet *8988.*

Simpson Strait: Eta Island *8693, 9029.*

Queen Maud Gulf: Enterprise Point *7936,* Anderson Bay *8223, 8449,* Foggy Bay *8138,* near Minto Islands *7978.*

Dease Strait: Starvation Cove *7275,* Qikirtaarjuk Islands *7117,* near Duncan Island *7197.*

Elu Inlet: unnamed island *8039.*

Melville Sound: Kuururjuak Point *8403,* Hurd Islands *8336.*

Bathurst Inlet: Cape Croker *8482.*

Dolphin and Union Strait: Bernard Harbour *6863,* Cockburn Point *8559.*

Prince of Wales Strait: Berkeley Point *9483.*

Amundsen Gulf: De Salis Bay *4563,* Thesiger Bay *3373,* Pearce Point *4407,* Gillet Bay *6748,* Police Point *6629,* Booth Island *6609.*

Audouinella efflorescens (J. Agardh) Papenfuss

Kjellman 1883, p. 129, pl. 12, figs. 1-2, as *Chantransia efflorescens;* Rosenvinge 1898, p. 40, as *C. efflorescens;* Waern 1952, p. 182; Zinova 1955, p. 61, fig. 55; Taylor 1957, p. 225; Lund 1959, p. 178, fig. 37; Woelkerling 1973, p. 584.

At depths within 2 and 35 m usually growing on other algae, less often on rocks, hydroids, and bryozoans. Occasional.

Eastern distribution.

Literature records.

Jones Sound: Goose Fjord (Rosenvinge 1926, as *Chantransia efflorescens*).

New records.

Hudson Bay: Munn Bay *74-255-9,* Eskimo Point *74-250-16.*

Southwestern distribution.

New records.

Simpson Strait: Eta Island *8664, 9023.*

Queen Maud Gulf: Anderson Bay *8166,* Foggy Bay *8062,* near Minto Islands *7977.*

Dease Strait: Qikirtaarjuk Islands *7175,* Wellington Bay *62-7305-2.*

Coronation Gulf: Anchor Island *6946.*

Prince of Wales Strait: Berkeley Point *9484.*

Amundsen Gulf: Sachs Harbour *3369,* Gillet Bay *6749,* Police Point *6668,* Booth Island *6580.*

Northwestern distribution.

New records.

Queens Channel: Milne Island *9102.*

Byam Channel: near Robertson Point *DH22-13.*

Audouinella hallandicum (Kylin) Woelkerling

Taylor 1957, p. 213, as *Kylinia hallandica*; Lund 1959, p. 178, fig. 36; Woelkerling 1973, p. 82, figs. 1-4.

At depths between 3 and 8 m. Epiphytic on *Chaetomorpha melagonium* at Bernard Harbour, *Rhodomela lycopodioides* at Police Point, and *Acrosiphonia hystrix* at Pim Island. Rare.

Eastern distribution.

Literature records.

Smith Sound: Pim Island (Rosenvinge 1926, as *Chantransia hallandica*).

Southwestern distribution.

New records.

Dolphin and Union Strait: Bernard Harbour *6861.*

Amundsen Gulf: Police Point *4240.*

Audouinella purpurea (Lightfoot) Woelkerling

Kjellman 1883, p. 184, pl. 15, figs. 8-13, as *Rhodochorton intermedium* and *R. rothii;* Rosenvinge 1893, p. 791, as *R. rothii;* Waern 1952, p. 183, as *R. rothii;* Zinova 1955, p. 63, fig. 57, as *R. purpureum;* Taylor 1957, p. 226, pl. 45, figs. 1-2, as *R. purpureum;* Lund 1959, p. 184, fig. 38, as *R. purpureum;* Woelkerling 1973, p. 536, figs. 52-55.

On intertidal boulders near Pond Inlet, occurring in dense populations made up entirely of the form known as *Rhodochorton purpureum* f. *intermedium* (Kjellman) S. Lund. Rare.

Eastern distribution.

Literature records.

Smith Sound: Fram Haven (Rosenvinge 1926, as *Rhodochorton rothii*).

Jones Sound: Cape Vera and "Børgo" (Rosenvinge 1926, as *R. rothii*).
Lancaster Sound: Dundas Harbour (Wheldon 1947, as *R. rothii*).
Baffin Bay: Cape Adair (Dickie 1853, as *Callithamnion rothii).*
Davis Strait: Cumberland Sound (Dickie 1867, as *C. rothii*; Farlow 1879, as *C. rothii*).
Hudson Strait: Forbes Sound, False River Bay, and Koksoak River (Wilce 1959, as *R. purpureum*).
New records.
Eclipse Sound: near Pond Inlet *2709.*

Audouinella spetsbergense (Kjellman) Woelkerling

Kjellman 1883, p. 186, pl. 16, figs. 6-7, as *Rhodochorton sparsum, R. mesocarpum* f. *penicilliformis,* and *R. spetsbergense;* Rosenvinge 1893, p. 792, fig. 9, as *R. mesocarpum* var. *penicilliforme*; 1898, p. 23; Zinova 1955, p. 62, fig. 56, as *R. penicilliforme;* Taylor 1957, p. 225, as *R. penicilliforme;* Woelkerling 1973, figs. 61-63.

Intertidal and subtidal on other algae, such as *Chaetomorpha melagonium* and *Sphacelaria arctica.*
Eastern distribution.
Literature records.
Smith Sound: Rice Strait (Rosenvinge 1926, as *Rhodochorton penicilliforme*).
Hell Gate: "Excrement Bay" or Cross Bay, "Reindeer Bay", and "Hare Point" (Rosenvinge 1926, as *R. penicilliforme*).
Davis Strait: Cumberland Sound (Dickie 1867, as *Callithamnion sparsum*).
Hudson Strait: Forbes Sound (Wilce 1959, as *R. penicilliforme*).

Colaconema membranacea (Magnus) Woelkerling

Rosenvinge 1893, p. 794, fig. 10, as *Rhodochorton membranaceum;* Taylor 1957, p. 224, pl. 31, figs. 11-12, as *Audouinella membranacea;* Lund 1959, p. 182, as *A. membranacea;* Woelkerling 1973, p. 566, figs. 64-65.

On bryozoans and, more commonly, hydroids. In the intertidal zone at Rankin Inlet, at depths of 3-15 m at other locations. Occasional.
Eastern distribution.
New records.
Bellot Strait: Fox Islands *8843.*
Hudson Bay: Rankin Inlet *74-253A-20.*
Southwestern distribution.
New records.
Dease Strait: Qikirtaarjuk Islands *7134.*
Coronation Gulf: Anchor Island *6945.*
Amundsen Gulf: Prince Albert Sound *9470,* Gillet Bay *6770,* Police Point *4352, 6669.*
Northwestern distribution.
New records.
Viscount Melville Sound: Nelson Griffiths Head *DH8-9,* near Little Point *DH2S7-11.*
Wilkins Strait, south of: Brock Island *3161.2.*

Order Cryptonemiales
Family Dumontiaceae

Dumontia incrassata (O.F. Müller) Lamouroux.

Kjellman 1883, p. 157, as *D. filiformis;* Rosenvinge 1893, p. 786, as *D. filiformis*; Zinova 1955, p. 68, figs. 60-61; Taylor 1957, p. 234, pl. 35, fig. 7, pl. 41, fig. 6.

A few small-sized thalli of this species was in the loose-lying community found at the 3-8 m depth on the mud bottom of Sachs Harbour. Rare.
Eastern distribution.
Literature records.
Lancaster Sound: Dundas Harbour (Bell and MacFarlane 1938, as *Dumontia filiformis*).
Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938, as *D. filiformis*).
James Bay: Grey Goose Island (Howe 1927).
Southwestern distribution.
New records.
Amundsen Gulf: Sachs Harbour *4650.*

Neodilsea integra (Kjellman) Zinova

Kjellman 1883, p. 152, pl. 14, figs. 1-3, as *Sarcophyllis arctica;* Rosenvinge 1898, p. 19, fig. 3, as *Dilsea integra;* Zinova 1955, p. 66, figs. 58-59, as *D. integra;* 1961, p. 82, figs. 1-2; Taylor 1957, p. 235, as *D. integra;* Lund 1959, p. 189, as *D. integra.*

At the 2-25 m depth on rocks and loose-lying on mud substrates. Sometimes on the holdfast of *Laminaria* and barnacles. Frequent.
Eastern distribution.
Literature records.
Hudson Strait: Forbes Sound and Koksoak River (Wilce 1959, as *Dilsea integra*).

Hudson Bay: between Otaska Harbour and Black Whale Harbour (Howe 1927, as *D. integra, CANA 4245*).

New records.

Jones Sound: Cape Skogn *9225*, near Cape Newman Smith *9244*.

Prince Regent Inlet: Creswell Bay *8867*.

Gulf of Boothia: Netsiksiuvik Inlet *8725*.

Hudson Strait: Westbourne Bay *2514*.

Hudson Bay: Eskimo Point *74-250-39*, Churchill *Crum 7632*.

James Bay: Swan River *CANA 4803*.

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cockburn Point (Collins 1927a, as *Sarcophyllis arctica, CANA 4033*).

New records.

St. Roch Basin: Peel Inlet *8973*.

Simpson Strait: Eta Island *8680, 8995*.

Queen Maud Gulf: Royal Geographical Society Islands *8599*, Enterprise Point *7926*, Anderson Bay *8171, 8273*, Foggy Bay *8073*, near Minto Islands *7980*.

Dease Strait: Qikirtaarjuk Islands *6985*.

Melville Sound: Hurd Islands *8320*.

Dolphin and Union Strait: Cockburn Point *8566*.

Amundsen Gulf: Pearce Point *4467*, Gillet Bay *6743*, Police Point *4333, 6646*, Booth Island *6530*.

Northwestern distribution.

New records.

Wellington Channel: Snowblind Bay *9149*.

Barrow Strait: Allison Inlet *9366*.

Beaufort Sea: Cape Prince Alfred *3073*.

Family Squamariaceae

Peyssonelia johanseni Howe

Howe 1927, p. 25, pl. 2.

"On stones at low tide."

Eastern distribution.

Literature records.

James Bay: near Halfway Point (Howe 1927, *CANA 4252 isotype*).

Peyssonelia rosenvingii Schmitz

Rosenvinge 1893, p. 782, fig. 8; 1898, p. 14; Zinova 1955, p. 73, fig. 64; Taylor 1957, p. 240; Lund 1959, p. 190.

On cobbles and pebbles at a depth of 9 m. Rare.

Eastern distribution.

Literature records.

Baffin Bay: Cape Adair (Dickie 1853, as *P. dubyi*).

Northwestern distribution.

New records.

Byam Martin Channel: near Burnett Point *DH11S1-3*.

Viscount Melville Sound: near Little Point *DH2S2-8*.

Rhodophysema elegans (Crouan and Crouan) Dixon

Rosenvinge 1898, p. 18, as *Rhododermis elegans;* Zinova 1955, p. 74, fig. 65, as *R. parasitica;* Taylor 1957, p. 238, as *R. elegans;* Lund 1959, p. 191, as *R. elegans*.

From 21 m to shallower depths on rocks and (at Anderson Bay) on *Phyllophora truncata*. Rare.

Eastern distribution.

Literature records.

Jones Sound: Harbour Fjord and Cape Vera (Rosenvinge 1926, as *Rhododermis elegans*).

Fram Sound: Norfolk Inlet (Rosenvinge 1926, as *R. elegans*).

Southwestern distribution.

New records.

Queen Maud Gulf: Royal Geographical Society Islands *8604*, Anderson Bay *8270*.

Northwestern distribution.

Literature records.

Crozier Channel: Mould Bay (Lee 1966).

New records.

Byam Martin Channel: near Towson Point *DH17-3*.

Byam Channel: near Robertson Point *DH22-5*.

Halosacciocolax kjellmanii Lund

Lund 1959, p. 193, figs. 40-41.

Parasitic growth on *Halosaccion ramentaceum* at the 3-9 m depth. Occasional.

Eastern distribution.

New records.

Kane Basin: northern Pim Island *9577*.

Jones Sound: Cape Skogn *9212*.

Southwestern distribution.

New records.

Simpson Strait: Eta Island *9027*.

Northwestern distribution.

New records.

Queens Channel: near Cape Becher *9759*.

Wellington Channel: Snowblind Bay *9154*.

McDougall Sound: Brooman Point *9255*.

Halosacciocolax lundii Edelstein

Edelstein 1972, p. 251, figs. 1-10; Guiry 1974, p. 31, figs. 1-6.

Parasitic growth on *Rhodymenia palmata* at the 2-8 m depth. Occasional.

Eastern distribution.

New records.

Jones Sound: Cape Skogn *9209.*

Adams Sound: Arctic Bay *on 2735.*

Davis Strait: Frobisher Bay *CANA 16954.*

Southwestern distribution.

New records.

Simpson Strait: Eta Island *9002.*

Queen Maud Gulf: Royal Geographical Society Islands *8619.*

Northwestern distribution.

New records.

Wellington Channel: Snowblind Bay *9151.*

Family Hildenbrandiaceae

Hildenbrandia prototypus Nardo

Kjellman 1883, p. 139, as *Hildbrandtia rosea;* Rosenvinge 1893, p. 826; 1898, p. 43; both as *H. rosea*; Waern 1952, p. 184; Zinova 1955, p. 75, fig. 66; Taylor 1957, p. 241, pl. 36, figs. 9-10; Lund 1959, p. 195.

On intertidal and subtidal rocks at Pangnirtung and Ungava Bay. In our collections on rocks at the 2-30 m depth. Rare.

Eastern distribution.

Literature records.

Davis Strait: Pangnirtung (Wheldon 1947).

Hudson Strait: Ungava Bay (Wilce 1959).

New records.

Gulf of Boothia: Netsiksiuvik Inlet *8744.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cockburn Point (Collins 1927a, *CANA 4031*).

New records.

Queen Maud Gulf: Foggy Bay *8152.*

Melville Sound: Hurd Islands *8348.*

Bathurst Inlet: Cape Croker *8501.*

Family Corallinaceae*

Clathromorphum compactum (Kjellman) Foslie

Kjellman 1883, p. 101, pl. 6, figs. 8-12; Rosenvinge 1893, p. 774, fig. 3, as *Lithothamnium circumscriptum;* 1898, p. 11, as *L. compactum* and *L. circumscriptum;* Foslie 1929, p. 28, pl. 41, figs. 1-12; Zinova 1955, p. 78, figs. 67-68, as *L. compactum;* Taylor 1957, p. 243, as *Phymatolithon compactum;* Lund 1959, p. 200, as *L. compactum,* Adey 1965, p. 540, pls. 1-5 in part, also as *C. circumscriptum.*

On rocks and shells of limpets and bivalves at the 2-15 m depth. Occasional.

Eastern distribution.

Literature records.

Smith Sound: Rice Strait (Rosenvinge 1926, as *Lithothamnium compactum*).

Jones Sound: Harbour Fjord, Goose Fjord, "Jammer Bay" or Bay of Woe, and Cape Vera (Rosenvinge 1926, as *L. compactum*).

Hell Gate: "Excrement Bay" or Cross Bay (Rosenvinge 1926, as *L. compactum*).

Hudson Bay: between Richmond Gulf and Great Whale River, and Long Island Sound (Howe 1927, as *Phymatolithon compactum*).

New records.

Adams Sound: Arctic Bay *2725.*

Bellot Strait: Fox Islands *8840.1.*

Gulf of Boothia: Victoria Harbour *8797.*

Hudson Bay: Munn Bay *74-255-1.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cockburn Point (Collins 1927a, as *L. compactum*).

New records.

Queen Maud Gulf: Anderson Bay *8199.*

Dolphin and Union Strait: Cockburn Point *8563.*

Prince of Wales Strait: Princess Royal Islands *9490.*

Amundsen Gulf: Cape Ptarmigan *9476.1,* Prince Albert Sound *9460, 9472,* Pearce Point *4508,* Booth Island *6614.*

Northwestern distribution.

New records.

Wellington Channel: Porden Point *9531.1.*

Barrow Strait: Rigby Bay *9328.1,* Radstock Bay *9321,* Intrepid Bay *9398.*

McDougall Sound: Templeton Bay *9119.2,* Freemans Cove *9315.*

Lithothamnium foecundum Kjellman

Kjellman 1883, p. 99, pl. 5, figs. 11-19; Rosenvinge 1893, p. 778, figs. 4-7, as *L.*

---

* *Mesophyllum lichenoides* (Ellis) Lemoine and *Lithothamnium fasciculatum* (Lamarck) Areschoug reported by Dickie (1953), respectively, from Cape Adair in Baffin Bay and Erebus Bay in Barrow Strait are too doubtful to be included in the Canadian Arctic flora.

tenue, in part; 1898, p. 12; Foslie 1929, p. 40, pl. 2, figs. 12-14; Zinova 1955, p. 85, figs. 74-75; Taylor 1957, p. 246; Lund 1959, p. 198; Adey 1966, p. 325, pl. 5, fig. 23, pl. 6, fig. 24, pl. 8, figs. 38, 42, pl. 15, figs. 96-98, as *Leptophytum foecundum.*

On rocks and shells of barnacles and bivalves at depths of 2-20 m. Occasional.

Eastern distribution.

Literature records.

Smith Sound: Rice Strait (Rosenvinge 1926).

Jones Sound: Harbour Fjord and Cape Vera (Rosenvinge 1926).

Cardigan Strait: Devil Island (Rosenvinge 1926).

New records.

Hall Basin: Discovery Harbour *9670.*

Kane Basin: Norman Lockyer Island *9713*, northern Pim Island *9606.*

Adams Sound: Arctic Bay *2724.*

Prince Regent Inlet: Creswell Bay *8890.*

Bellot Strait: Fox Islands *8840.2.*

Gulf of Boothia: Netsiksiuvik Inlet *8734.*

Southwestern distribution.

New records.

Prince of Wales Strait: Princess Royal Islands *9493.2.*

Amundsen Gulf: Cape Ptarmigan *9474.1.*

Northwestern distribution.

New records.

Nanson Sound: Cape St. Andrew *9546,* Butter Porridge Point *9555.*

Sverdrup Channel: near East Fjord *9721.*

Wellington Channel: Porden Point *9529.1.*

McDougall Sound: Freemans Cove *9317.1.*

Viscount Melville Sound: near Little Point *DHS7-1.*

Wilkins Strait, south of: Brock Island *3158.*

Lithothamnium glaciale Kjellman

Kjellman 1883, p. 93, pls. 2-3; Rosenvinge 1893, p. 773; 1898, p. 9; Foslie 1929, p. 41, pl. 18, figs. 10-22, pls. 21, 23-24, also as *L. colliculosum* and *L. granii;* Zinova 1955, p. 87, figs. 77-78, also as *L. colliculosum;* Taylor 1957, p. 247, also as *L. colliculosum.*

On rocks at depths of 2-15 m. Occasional.

Eastern distribution.

Literature records.

Jones Sound: Harbour Fjord, "Jammer Bay" or Bay of Woe (Rosenvinge 1926).

Hell Gate: "Excrement Bay" or Cross Bay (Rosenvinge 1926).

Hudson Bay: between Richmond Gulf and Great Whale River, and Long Island Sound (Howe 1927).

New records.

Adams Sound: Arctic Bay *2723.*

Gulf of Boothia: Victoria Harbour *8798.*

Hudson Bay: Munn Bay *74-255-3.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cockburn Point (Collins 1927a).

New records.

Queen Maud Gulf: Anderson Bay *8200.*

Bathurst Inlet: Cape Croker *8500,* Buchan Bay *8533.*

Prince of Wales Strait: Princess Royal Islands *9491,* Berkeley Point *9487.*

Amundsen Gulf: Cape Ptarmigan *9477,* Prince Albert Sound *9464, 9473.*

Northwestern distribution.

New records.

Wellington Channel: Porden Point *9530.2.*

Wilkins Strait, south of: Brock Island *3168.*

Lithothamnium laeve (Strömfelt) Foslie

Rosenvinge 1893, p. 778, figs. 4-7, as *L. tenue,* in part; 1898, p. 14; Foslie 1929, p. 43, pl. 3, figs. 4-9; Taylor 1957, p. 246; Lund 1959, p. 198; Adey 1966, p. 324, pl. 5, figs. 21-22, pl. 8, figs. 35-37, 39-41, pl. 11, figs. 60-62, pls. 12-13, pl. 14, figs. 81-90, as *Leptophytum laeve.*

On rocks and bivalve shells at depths of 7-24 m. Occasional.

Eastern distribution.

Literature records.

Smith Sound: Rice Strait (Rosenvinge 1926).

Jones Sound: Harbour Fjord, Goose Fjord, near Walrus Fjord, "Jammer Bay" or Bay of Woe, and Cape Vera (Rosenvinge 1926).

Hell Gate: "Excrement Bay" or Cross Bay (Rosenvinge 1926).

Cardigan Strait: Devil Island (Rosenvinge 1926).

Hudson Bay: Richmond Gulf (Howe 1927, *CANA 4224*).

New records.

Kane Basin: Copes Bay *9697.*

Gulf of Boothia: Victoria Harbour *8778,* Netsiksiuvik Inlet *8756.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cockburn Point (Collins 1927a).

Northwestern distribution.
New records.
Sverdrup Channel: Expedition Fjord *9720.*
Wellington Channel: Porden Point *9529.2.*
Barrow Strait: Rigby Bay *9328.2,* Intrepid Bay *9399.*
McDougall Sound: Templeton Bay *9120.*
Byam Martin Channel: near Burnett Point *DH11S1-4.*
Byam Channel: near Robertson Point *DH22-9.*
Viscount Melville Sound: near Little Point *DH10-1.*
Wilkins Strait, south of: Brock Island *3177.*

Phymatolithon laevigatum (Foslie) Foslie
Foslie 1929, p. 47, pl. 39, figs. 13-14; Taylor 1957, p. 244.
Eastern distribution.
Literature records.
Hudson Bay: Long Island Sound (Howe 1927).

Phymatolithon polymorphum (Linnaeus) Foslie
Kjellman 1883, p. 102, as *Lithothamnium polymorphum;* Zinova 1955, p. 80, figs. 68-70, as *L. polymorphum;* Taylor 1957, p. 243.
Eastern distribution.
Literature records.
Barrow Strait: Erebus Bay (Dickie 1852, as *Melobesia polymorpha*), Union Bay (Dickie 1853, as *M. polymorpha*).

Family Kallymeniaceae

Callophyllis cristata (C. Agardh) Kützing
Kjellman 1883, p. 145; Rosenvinge 1893, p. 813: 1898, p. 28; Zinova 1955, p. 105, figs. 95-96; Taylor 1957, p. 256, pl. 60, figs. 2-3; Lund 1959, p. 201, — all as *Euthora cristata;* Hooper and South 1974, p. 424, figs. 1-7.
At depths of 3-12 m on rocks, other algae, and Bryozoa. Occasional.
Eastern distribution.
Literature records (all as *Euthora cristata*).
Jones Sound: Goose Fjord (Rosenvinge 1926).
Hell Gate: "Excrement Bay" or Cross Bay, "Reindeer Bay", and Lands End (Rosenvinge 1926).
Davis Strait: Cumberland Sound (Dickie 1867, Farlow 1879).
Hudson Strait: Port Harvey and Forbes Sound (Wilce 1959), Ungava Bay (Farlow 1886), Wakeham Bay (Collins 1927b)
Hudson Bay: Depot Island (Setchell and Collins 1908).
New records.
Jones Sound: Cape Skogn *9215.*
Bellot Strait: Fox Islands *8845.*
Davis Strait: Frobisher Bay *CANA 16979.*
Hudson Strait: Westbourne Bay *2463.*
Hudson Bay: Ivugivik *2594.3.*
Northwestern distribution.
New records.
Wellington Channel: Snowblind Bay *9156.*

Kallymenia schmitzii De Toni
Rosenvinge 1893, p. 819, pl. 2, fig. 4, as *Callymenia sanguinea;* Zinova 1955, p. 104, fig. 94; Taylor 1957, p. 258.
On rocks at depths of 10-25 m.
Eastern distribution.
Literature records.
Jones Sound: "Jammer Bay" or Bay of Woe (Rosenvinge 1926).
Hell Gate: "Reindeer Cove" (Rosenvinge 1926).
Hudson Strait: Ungava Bay (Farlow 1886, as *K. pennyi?*), False River Bay and Koksoak River (Wilce 1959).

Family Choreocolaceae

Choreocolax odonthaliae Levring
Levring 1935, p. 55, fig. 11; Kylin 1944, p. 48, fig. 38.
Parasitic growth on *Odonthalia dentata* at the 5-19 m depth. Occasional.
Eastern distribution.
New records.
Jones Sound: Cape Skogn *9207.*
Southwestern distribution.
New records.
Rasmussen Basin: Peterson Bay *74-262C-9.*
Simpson Strait: Eta Island *8679, 9018.*
Queen Maud Gulf: Royal Geographical Society Islands *8623,* Foggy Bay *8088.*
Northern distribution.
New records.
Viscount Melville Sound: Nelson Griffiths Point *DH8-6.*

Harveyella mirabilis (Reinsch) Schmitz and Reinke
Rosenvinge 1893, p. 823; 1898, p. 39; Zinova 1955, p. 109, fig. 98; Taylor 1957,

p. 260; Lund 1959, p. 202; Goff and Cole 1975, p. 227, figs. 1-28.

Parasitic growth on *Rhodomela lycopodioides* at depths of 2-35 m. Frequent in southwestern region, occasional elsewhere.

Eastern distribution.

Literature records.

Hudson Strait: False River Bay and Koksoak River (Wilce 1959).

James Bay: James Bay (Setchell and Collins 1908).

New records.

Jones Sound: Cape Skogn *9223.*

Hudson Bay: Eskimo Point *74-250-19.*

Southwestern distribution.

New records.

St. Roch Basin: Peel Inlet *8989.*

Rasmussen Basin: Peterson Bay *74-262B-10.*

Simpson Strait: Eta Island *8661, 9044.*

Queen Maud Gulf: Enterprise Point *7904,* Anderson Bay *8230, 8464,* Foggy Bay *8146,* near Minto Islands *7990.*

Dease Strait: Starvation Cove *7265,* Qikirtaarjuk Islands *7147.*

Coronation Gulf: Anchor Island *6990.*

Dolphin and Union Strait: Cockburn Point *8558.*

Amundsen Gulf: Sachs Harbour *3354.2,* Gillet Bay *6793,* Police Point *6687,* Booth Island *6578.*

Northwestern distribution.

New records.

Barrow Strait: Allison Inlet *9379.*

Byam Channel: near Robertson Point *DH7-4.*

Beaufort Sea: Cape Prince Alfred *3066.2.*

Order Gigartinales

Family Cruoriaceae

Cruoria arctica Schmitz

Rosenvinge 1893, p. 784; 1898, p. 15, fig. 1; 1910, p. 102; Kjellman 1906, p. 14, pl. 1, figs. 1-7, as *C. firma*; Taylor 1957, p. 262; Lund 1959, p. 203.

On rocks and barnacles at depths within 2 and 25 m. Occasional. This small, crust-forming alga, of which our collection consisted only of sterile specimens, is a possible tetrasporophytic phase in a life cycle with *Turnerella pennyi* according to South et al. (1972).

Eastern distribution.

Literature records.

Smith Sound: Rice Strait (Rosenvinge 1926).

Jones Sound: "Jammer Bay" or Bay of Woe (Rosenvinge 1926).

New records.

Hall Basin: Discovery Harbour *9671.*

Kane Basin: northern Pim Island *9604.*

Gulf of Boothia: Victoria Harbour *8779,* Netsiksiuvik Inlet *8745.*

Cruoriopsis hyperborea Rosenvinge

Rosenvinge 1910, p. 102, fig. 2; Taylor 1957, p. 239; Lund 1959, p. 208.

At about the 10 m depth on rocks, barnacles, and corallines.

Eastern distribution.

Literature records.

Smith Sound: Rice Strait (Rosenvinge 1926).

Jones Sound: Harbour Fjord, and "Jammer Bay" or Bay of Woe (Rosenvinge 1926).

Petrocelis polygyna (Kjellman) Schmitz

Kjellman 1883, p. 142, pl. 11, as *Haemescharia polygyna;* Rosenvinge 1898, p. 16, fig. 2; Zinova 1955, p. 114, figs. 101-102; Lund 1959, p. 205.

On rocks and shells.

Eastern distribution.

Literature records.

Jones Sound: "Børgo" (Rosenvinge 1926, as *Petrocelis* sp., according to Lund 1959).

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point (Lee 1966).

Petrocelis sp.

On rocks at the 2-10 m depth. Occasional. Some specimens (e.g., those from near Burnett Point) have cell dimensions approximating those of *Petrocelis polygyna.* Most have much larger cells, with widths of up to 14.2 μ and lengths as much as 6 times the width.

Southwestern distribution.

New records.

Victoria Strait: Victory Point *8948.*

Queen Maud Gulf: Royal Geographical Society Islands *8628,* near Minto Islands *7995.*

Dease Strait: Starvation Cove *7255,* near Duncan Island *7186.*

Amundsen Gulf: Police Point *6665,* Booth Island *6585.*

Northwestern distribution.

New records.

Byam Martin Channel: near Burnett Point *DH11S1-5.*

Family Solieriaceae

Turnerella pennyi (Harvey) Schmitz

Kjellman 1883, p. 160, pl. 14, figs. 4-6, as *Kallymenia pennyi, K. rosacea,* and *K. septemtrionalis;* Rosenvinge 1893, p. 815, fig. 3, pl. 2, fig. 3, also as *T. septemtrionalis;* 1898, p. 29, fig. 5; Zinova 1955, p. 120, figs. 105-108, also as *T. septemtrionalis;* Taylor 1957, p. 265; Lund 1959, p. 209, fig. 42; South et al. 1972, p. 221, figs. 1-13.

At the 7-25 m depth on rocks. Occasional.

Eastern distribution.

Literature records.

Smith Sound: Rice Strait (Rosenvinge 1926).

Jones Sound: Harbour Fjord, Walrus Fjord, "Jammer Bay" or Bay of Woe, and Cape Vera (Rosenvinge 1926).

Hell Gate: "Excrement Bay" or Cross Bay, "Reindeer Cove", and Lands End (Rosenvinge 1926).

Bellot Strait: Port Kennedy (Dickie 1861, as *Kallymenia pennyi*).

Davis Strait: Cumberland Sound (Dickie 1867, as *K. pennyi*).

Hudson Bay: Richmond Gulf and between Otaska Harbour and Black Whale Harbour (Howe 1927, *CANA 4179* and *4181*).

New records.

Hall Basin: Discovery Harbour *9662.*

Kane Basin: northern Pim Island *9602.*

Fram Sound: Rodberg Bay *9192.*

Prince Regent Inlet: Creswell Bay *8863.*

Bellot Strait: Fox Islands *8830.*

Gulf of Boothia: Victoria Harbour *8774,* Netsiksiuvik Inlet *8729.*

Davis Strait: Frobisher Bay *CANA 16956.*

Repulse Bay: Talun Bay *74-255B-2.*

Northwestern distribution.

Literature records.

Barrow Strait: Assistance Bay (Dickie 1852, Harvey 1858; both as *K. pennyi*).

Queens Channel: 76°29' N. 96°13' W. (Harvey 1858, as *K. pennyi*).

New records.

Wellington Channel: Porden Point *9535.*

Barrow Strait: Assistance Bay *62-4001-1.*

Wilkins Strait, south of: Brock Island *3186.*

Family Rhodophyllidaceae

Rhodophyllis dichotoma (Lepeschikin) Gobi

Kjellman 1883, p. 144, pl. 12, fig. 3; Rosenvinge 1893, p. 812; Zinova 1955, p. 127, figs. 113-116; Taylor 1957, p. 269, pl. 60, fig. 1.

Subtidal, 15-25 m at Hell Gate.

Eastern distribution.

Literature records.

Hell Gate: "Excrement Bay" or Cross Bay, and "Reindeer Bay" (Rosenvinge 1926).

Davis Strait: Cumberland Sound (Farlow 1879, as *Rhodophyllis veprecula*).

Hudson Strait: Ungava Bay (Farlow 1886, as *R. veprecula*), Port Harvey, Forbes Sound, and False River Bay (Wilce 1959).

Family Phyllophoraceae

Ahnfeltia plicata (Hudson) Fries

Kjellman 1883, p. 166; Zinova 1955, p. 134, figs. 120-121; Taylor 1957, p. 275, pl. 35, fig. 1, pl. 40, fig. 6; Lund 1959, p. 214.

Attached to rocks and loose-lying between the 3 and 18 m depth. Also intertidal in Hudson Strait and Hudson Bay. Occasional.

Eastern distribution.

Literature records.

Lancaster Sound: Dundas Harbour (Wheldon 1947).

Bellot Strait: Port Kennedy (Dickie 1861, as *Gymnogongrus plicatus*).

Eclipse Sound: Pond Inlet (Wheldon 1947).

Davis Strait: Cumberland Sound (Dickie 1867).

Hudson Strait: Forbes Sound (Wilce 1959), Hudson Strait (Bell and MacFarlane 1933).

Hudson Bay: between Richmond Gulf and Great Whale River (Howe 1927, *CANA 4159*).

James Bay: Grey Goose Island (Howe 1927, *CANA 4160*), Charlton Island (Bell and MacFarlane 1938), near Halfway Point (Howe 1927, *CANA 4197*), James Bay (Setchell and Collins 1908).

New records.

Hudson Bay: Munn Bay *74-255-10,* Great Whale River *Savile 398,* Churchill *Crum 7598.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cape Young (Collins 1927a, *CANA 4078*).

New records.
Simpson Strait: Eta Island *9048.*
Queen Maud Gulf: Foggy Bay *8083.*
Bathurst Inlet: Cape Croker *8497.*

Phyllophora truncata (Pallas) Newroth and Taylor

Kjellman 1883, p. 163, as *P. brodiaei* and *P. interrupta;* Rosenvinge 1893, p. 821; 1898, p. 32, fig. 6, both as *P. brodiaei;* Waern 1952, p. 190, as *P. brodiaei*; Zinova 1955, p. 131, figs. 117-119, as *P. brodiaei* and *P. interrupta*; Taylor 1957, p. 278, pl. 39, fig. 2, as *P. brodiaei* and *P. interrupta*; Lund 1959, p. 212, as *P. brodiaei;* Newroth 1971, p. 226.

At depths of 2-25 m loose-lying on mud substrates or attached to rocks, *Laminaria* haptera, and polychaete casings. Usually in dense populations. Frequent.

Eastern distribution.
Literature records.
Smith Sound: 78-82° N. (Ashmead 1864, as *Rhodymenia interrupta*), Fram Haven and Pim Island (Rosenvinge 1926, as *Phyllophora brodiaei*).
Jones Sound: Goose Fjord (Rosenvinge 1926, as *P. brodiaei*).
Hell Gate: "Excrement Bay" or Cross Bay "Reindeer Bay", "Hare Point", and Lands End (Rosenvinge 1926, as *P. brodiaei*).
Fram Sound: Norfolk Inlet (Rosenvinge 1926, as *P. brodiaei*).
Bellot Strait: Port Kennedy (Dickie 1861, as *R. interrupta*).
Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938, as *P. brodiaei*).
Davis Strait: Cumberland Sound (Farlow 1879, as *P. interrupta*).
Hudson Strait: Ungava Bay (Farlow 1886, as *P. interrupta*), False River Bay and Koksoak River (Wilce 1959, as *P. brodiaei* and *P. interrupta*).
Hudson Bay: Depot Island (Setchell and Collins 1908, as *P. brodiaei*), Churchill (Bell and MacFarlane 1938, as *P. brodiaei*), between Otaska Harbour and Black Whale Harbour (Howe 1927, as *P. interrupta, CANA 4254*).
James Bay: James Bay (Setchell and Collins 1908, as *P. brodiaei*).
New records.
Robeson Channel: near Cape Rawson *9628.*
Hall Basin: Discovery Harbour *9678.*
Kane Basin: Copes Bay *9698,* northern Pim Island *9607.*
Jones Sound: near Cape Newman Smith *9242,* Boat Point *9170.*
Prince Regent Inlet: Creswell Bay *8865.*
Gulf of Boothia: Victoria Harbour *8792,* Netsiksiuvik Inlet *8724.*
Davis Strait: Frobisher Bay *CANA 16961.*
Repulse Bay: Talun Bay *74-255B-7.*
Hudson Bay: Rankin Inlet *74-252A-4,* Eskimo Point *74-250-8,* Churchill *Crum 7650.*

Southwestern distribution.
Literature records.
Dolphin and Union Strait: Bernard Harbour, Cockburn Point and Cape Young (Collins 1927a, as *P. brodiaei, CANA 4097*).
New records.
St. Roch Basin: Spence Bay *74-259-1,* Peel Inlet *8980.*
Rasmussen Basin: Peterson Bay *74-262-4.*
Simpson Strait: Eta Island *9004.*
Queen Maud Gulf: Royal Geographical Society Islands *8633,* Anderson Bay *8192, 8417,* Foggy Bay *8068,* near Minto Islands *7963.*
Dease Strait: Qikirtaarjuk Islands *7098.*
Coronation Gulf: Anchor Island *6915.*
Dolphin and Union Strait: Cockburn Point *8560.*
Amundsen Gulf: Sachs Harbour *3355,* Pearce Point *4462,* Gillet Bay *6792,* Police Point *6648.*
Mackenzie Bay: Herschel Island *60-1016-1.*

Northwestern distribution.
Literature records.
Crozier Channel: Manson Point and Mould Bay (Lee 1966, as *P. brodiaei*).
New records.
Norwegian Bay: near Lands End *9543.*
Queens Channel: Milne Island *9092.*
Barrow Strait: Allison Inlet *9361.*
McDougall Sound: Freemans Cove *9308.*
Austin Channel: Hooker Bay *9338.*
Byam Channel: near Consett Head *DH6-1,* near Robertson Point *DH15-3.*
Viscount Melville Sound: near Little Point *DH2S9-9, DH9S1-1.*
Kellett Strait: near Pedder Point *3088.2.*
Crozier Channel: Manson Point *3130.*
Beaufort Sea: Cape Prince Alfred *3067.1.*

Ceratocolax hartzii Rosenvinge

Rosenvinge 1898, p. 34, figs. 7-9; Zinova 1955, p. 135, fig. 122; Taylor 1957, p. 259; Lund 1959, p. 215.

Parasitic growth on *Phyllophora truncata* at the 2-25 m depth. Frequent.

Eastern distribution.

Literature records.

Smith Sound: Pim Island and Fram Haven (Rosenvinge 1926).

Jones Sound: Goose Fjord (Rosenvinge 1926).

Hell Gate: Lands End and "Reindeer Bay" (Rosenvinge 1926).

Hudson Strait: False River Bay and Koksoak River (Wilce 1959).

New records.

Hall Basin: Discovery Harbour *9679.*

Kane Basin: Copes Bay *9699,* Northern Pim Island *9614.*

Prince Regent Inlet: Creswell Bay *8884.*

Gulf of Boothia: Victoria Harbour *8793,* Netsiksiuvik Inlet *8725.*

Davis Strait: Frobisher Bay *CANA 16981.*

Repulse Bay: Talun Bay *74-255B-8.*

Hudson Bay: Rankin Inlet *74-252A-6,* Eskimo Point *74-250-9,* Churchill *CANA 7330.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cockburn Point (Collins 1927a, *CANA 4095*).

New records.

St. Roch Basin: Spence Bay *74-259-2,* Peel Inlet *8981.*

Rasmussen Basin: Peterson Bay *74-262-5.*

Simpson Strait: Eta Island *9005.*

Queen Maud Gulf: Royal Geographical Society Islands *8621*, Anderson Bay *8193,* Foggy Bay *8066,* near Minto Islands *7964.*

Dease Strait: Qikirtaarjuk Islands *7101.*

Dolphin and Union Strait: Bernard Harbour *CANA 7327,* Cockburn Point *8561*, Cape Young *CANA 7332.*

Amundsen Gulf: Sachs Harbour *3359*, Pearce Point *4469,* Police Point *6649.*

Mackenzie Bay: Herschel Island *60-1016-2.*

Northwestern distribution.

New records.

Norwegian Bay: near Lands End *9544.*

Queens Channel: Milne Island *9093.*

Barrow Strait: Allison Inlet *9364.*

McDougall Sound: Freemans Cove *9310.*

Austin Channel: Hooker Bay *9342.*

Byam Channel: near Consett Head *DH6-2.*

Crozier Channel: Manson Point *3130.1.*

Order Rhodymeniales
Family Rhodymeniaceae

Halosaccion ramentaceum (Linnaeus) J. Agardh

Kjellman 1883, p. 153, pl. 12, fig. 4, pl. 13; Rosenvinge 1893, p. 825; 1898, p. 43; Zinova 1955, p. 151, figs. 132-133; Taylor 1957, p. 284; Lund 1959, p. 216.

Loose-lying and attached to rocks at depths of 3-30 m. Frequent.

Eastern distribution.

Literature records.

Smith Sound: Pim Island and Rice Strait (Rosenvinge 1926), 78-82° N. (Ashmead 1864, as *Soliera chordalis**).

Jones Sound: Craig Harbour (Lund 1933), Cape Vera (Rosenvinge 1926).

Fram Sound: Norfolk Inlet (Rosenvinge 1926).

Hell Gate: "Excrement Bay" or Cross Bay, "Hare Point", and Lands End (Rosenvinge 1926).

Davis Strait: Cumberland Sound (Dickie 1867, also as *Halosaccion dumontioides;* Farlow 1879, as *Phyllophora membranifolia* according to his 1886 paper), Pangnirtung (Wheldon 1947).

Hudson Strait: Ungava Bay (Wilce 1959), Wakeham Bay (Bell and MacFarlane 1938), Hudson Strait (Bell and MacFarlane 1933).

New records.

Hall Basin: Distant Cape *9659.*

Kane Basin: northern Pim Island *9562, 9576.*

Jones Sound: Cape Skogn *9198,* Boat Point *9175.*

Fram Sound: Rodberg Bay *9186.*

Prince Regent Inlet: Creswell Bay *8892.*

Bellot Strait: Fox Islands *8819.*

Gulf of Boothia: Netsiksiuvik Inlet *8736.*

Eclipse Sound: near Pond Inlet *2691.*

Davis Strait: Frobisher Bay *CANA 16973.*

Hudson Strait: Westbourne Bay *2462.1*, Ashe Inlet *CANA 5810,* Negus Bay *2573,* Wakeham Bay *2639.1.*

Repulse Bay: Talun Bay *74-256-6.*

Southwestern distribution.

---

* Farlow (1882) had stated that this could actually have been *Cystoclonium purpurascens*, in which event it would be the only Canadian Arctic record for that species. Kjellman (1883) later noted that it could also have been *Halosaccion ramentaceum.*

New records.
Rasmussen Basin: Peterson Bay *74-262C-8.*
Simpson Strait: Eta Island *8683, 9047.*
Amundsen Gulf: Sachs Harbour *3365,* Booth Island *6544.*
Northwestern distribution.
Literature records.
Penny Strait: Northumberland Sound (Harvey 1858, as *H. dumontioides*).
Queens Channel: Queens Channel (Harvey 1858).
Crozier Channel: Mould Bay (Lee 1966).
New records.
Norwegian Bay: near Lands End *9541.*
Penny Strait: near Russell Island *9744,* Hungry Bay *62-4304-2.*
Queens Channel: near Cape Becher *9758,* Milne Island *9099.*
Wellington Channel: Snowblind Bay *9153.*
Barrow Strait: near Cape Dungeness *9522,* Assistance Bay *62-4001-3.*
McDougall Sound: Templeton Bay *9104,* Brooman Point *9254.*
Byam Channel: Robertson Point *DH7-14.*
Crozier Channel: Manson Point *3131.*
Beaufort Sea: Cape Prince Alfred *3062.1.*

Rhodymenia palmata (Linnaeus) Greville
Kjellman 1883, p. 147; Rosenvinge 1893, p. 809: 1898, p. 28; Zinova 1955, p. 143, figs. 125-130; Taylor 1957, p. 285, pl. 41, fig. 7, pl. 42, fig. 3; Lund 1959, p. 217.
At depths of 2-15 m on rocks and at times on *Laminaria longicruris* (stipe), and *Fucus distichus*. Occasional.
Eastern distribution.
Literature records.
Jones Sound: Craig Harbour (Lund 1933).
Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938).
Davis Strait: Cumberland Sound (Dickie 1867).
Hudson Strait: Ungava Bay (Farlow 1886, Wilce 1959), Forbes Sound (Wheldon 1947), Hudson Strait (Bell and MacFarlane 1933), Wakeham Bay (Bell and MacFarlane 1933).
Hudson Bay: Hudson Bay (Bell and MacFarlane 1933).
James Bay: James Bay (Setchell and Collins 1908), Grey Goose Island (Howe 1927, *CANA 4169*), Charlton Island (Howe 1927, *CANA 4209*; Bell and MacFarlane 1938).
New records.
Jones Sound: Cape Skogn *9208.*
Adams Sound: Arctic Bay *2745.*
Prince Regent Inlet: Creswell Bay *8897.*
Eclipse Sound: near Pond Inlet *2681.*
Davis Strait: Frobisher Bay *CANA 16954.*
Hudson Strait: Westbourne Bay *2472,* Negus Bay *2547.*
Repulse Bay: Talun Bay *74-256-8.*
Hudson Bay: Ivugivik Harbour *2586,* Churchill *Crum 7622.*
Southwestern distribution.
New records.
Simpson Strait: Eta Island *8665, 8998.*
Victoria Strait: Victory Point *8956.*
Queen Maud Gulf: Royal Geographical Society Islands *8618.*
Northwestern distribution.
Literature records.
Penny Strait: Northumberland Sound (Harvey 1858).
New records.
Queens Channel: near Cape Becher *9761.*
Wellington Channel: Snowblind Bay *9150.*
Barrow Strait: Cunningham Inlet *9767.*

Order Ceramiales
Family Ceramiaceae

Antithamnion americanum (Harvey) Farlow
Kjellman 1883, p. 184; Zinova 1955, p. 162; Taylor 1957, p. 294.
On rocks at the 3-8 m depth. Rare.
Eastern distribution.
Literature records.
Bellot Strait: Port Kennedy (Dickie 1861, as *Callithamnium americanum*).
Davis Strait: Cumberland Sound (Dickie 1867, as *C. americanum*).
Hudson Strait: Ungava Bay (Farlow 1886, as *C. americanum*).
New records.
Davis Strait: Frobisher Bay *CANA 13962.*
Hudson Strait: Westbourne Bay *2525.*

Antithamnion boreale (Gobi) Kjellman
Kjellman 1883, p. 180, pl. 16, figs. 2-5; Rosenvinge 1893, p. 787, as *A. plumula* var. *boreali;* 1898, p. 21, as *A. plumula* var. *boreale;* Zinova 1955, p. 158, fig. 136; Taylor 1957, p. 293; Lund 1959, p. 218.
At the 2-15 m depth on rocks, hydroids (*Abietinaria*), and various other algae: *Chaetomorpha melagonium, Sphacelaria arctica, S. plumosa, Laminaria solidungula* (holdfast), *Fucus distichus, Ahnfeltia plicata,*

Phyllophora truncata, Rhodymenia palmata, and *Phycodrys rubens.* Frequent in the southwest, occasional elsewhere.

Eastern distribution.

Literature records.

Smith Sound: Pim Island (Rosenvinge 1926).

Jones Sound: Goose Fjord (Rosenvinge 1926).

Hudson Strait: Ungava Bay (Farlow 1886, as *Callithamnion boreale*), Hudson Strait (Bell and MacFarlane 1933, as *Antithamnion cruciatum*, probably).

Hudson Bay: Richmond Gulf and between Otaska Harbour and Black Whale Harbour (Howe 1927, *CANA 4161* and *4163*).

James Bay: Grey Goose Island (Howe 1927, *CANA 4165*), James Bay (Setchell and Collins 1908).

New records.

Prince Regent Inlet: Creswell Bay *8891.*

Hudson Strait: Wakeham Bay *2664.2.*

Hudson Bay: Eskimo Point *74-250-17.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cape Young (Collins 1927a, *CANA 4047*).

New records.

Rasmussen Basin: Peterson Bay *74-262B-5.*

Simpson Strait: Eta Island *8674, 9037.*

Queen Maud Gulf: Foggy Bay *8142,* near Minto Islands *7962.*

Dease Strait: Qikirtaarjuk Islands *7136,* Wellington Bay *62-7300-1.*

Melville Sound: Kuururjuak Point *8397,* Hurd Islands *8351.*

Bathurst Inlet: Buchan Bay *8530.*

Prince of Wales Strait: Berkeley Point *9485.*

Amundsen Gulf: Prince Albert Sound *9471,* Pearce Point *4461,* Gillet Bay *6717,* Police Point *4310, 6661,* Booth Island *6554.*

Northwestern distribution.

New records.

Queens Channel: Milne Island *9097.*

Barrow Strait: Allison Inlet *9377.*

McDougall Sound: Brooman Point *9266.*

Byam Channel: near Robertson Point *DH7, DH15-7,* near Kay Point *DH25-2.*

Viscount Melville Sound: near Little Point *DH257-9.*

Antithamnion pylaisaei (Montagne) Kjellman

Kjellman 1883, p. 179, pl. 16, fig. 1; Rosenvinge 1893, p. 788, as *A. plumula* var. *pylaisaei;* Zinova 1955, p. 160, fig. 137; Taylor 1957, p. 295.

On intertidal *Fucus distichus* at Rankin Inlet, on rocks at the 3-8 m depth at Negus Bay. Rare.

Eastern distribution.

Literature records.

Davis Strait: Cumberland Sound (Farlow 1879, as *Callithamnion pylaisaei*).

Hudson Strait: Ungava Bay (Farlow 1886, as *C. pylaisaei*).

New records.

Hudson Strait: Negus Bay *2570.*

Hudson Bay: Rankin Inlet *74-253A-7.*

Ceramium rubrum (Hudson) C. Agardh

Kjellman 1883, p. 170, pl. 15, fig. 7; Rosenvinge 1893, p. 786; Zinova 1955, p. 167, fig. 142; Taylor 1957, p. 315, pl. 47, fig. 1, pl. 52, figs. 6-7.

Eastern distribution.

Literature records.

Davis Strait: Cumberland Sound (Farlow 1879).

Ceramium tenuissimum (Roth) J. Agardh

Zinova 1955, p. 164, fig. 138.

"Found on beach".

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cape Young (Collins 1927a, *CANA 4040*).

Ptilota pectinata (Gunnerus) Kjellman

Kjellman 1883, p. 174, pl. 15, figs. 1-6; Rosenvinge 1893, p. 790; 1898, p. 22; Zinova 1955, p. 175, fig. 146; Taylor 1957, p. 306, pl. 52, fig. 1, as *P. serrata;* Lund 1959, p. 220.

On rocks at the 3-8 m depth in Westbourne Bay and Negus Bay. Also on *Phyllophora truncata* dredged from a depth of 22-27 m in Frobisher Bay. Rare.

Eastern distribution.

Literature records.

Jones Sound: Cape Vera (Rosenvinge 1926).

Davis Strait: Cumberland Sound (Dickie 1867, as *P. serrata;* Farlow 1879, as *P. plumosa* var. *serrata*).

Hudson Strait: Ungava Bay (Farlow 1886; Wilce 1959, as *P. serrata*), Wakeham Bay (Collins 1927b), Cape Wolstenholme (Bell and MacFarlane 1938), Hudson Strait (Bell and MacFarlane 1933).

Hudson Bay: Depot Island (Setchell and Collins 1908), Hudson Bay (Bell and MacFarlane 1938).
James Bay: James Bay (Setchell and Collins 1908).
New records.
Davis Strait: Frobisher Bay *CANA 16980.*
Hudson Strait: Westbourne Bay *2503,* Ashe Inlet *CANA 6609,* Negus Bay *2561.*

Ptilota plumosa (Hudson) C. Agardh
Kjellman 1883, p. 173; Rosenvinge 1893, p. 790; Zinova 1955, p. 172, figs. 144-145; Taylor 1957, p. 307.
On rocks at the 3-6 m depth. Rare.
Eastern distribution.
Literature records.
Hudson Strait: Forbes Sound (Wilce 1959).
New records.
Jones Sound: Cape Skogn *9214,* near Cape Newman Smith *9240.*
Northwestern distribution.
New records.
McDougall Sound: near Brooman Point *9265.*

Family Delesseriaceae

Membranoptera alata (Hudson) Stackhouse
Kjellman 1883, p. 134, as *Delesseria alata;* Zinova 1955, p. 179, figs. 147-148; Taylor 1957, p. 321, pl. 53, figs. 4-6.
The specimens from Frobisher Bay were on *Turnerella pennyi* dredged from a depth of 22-27 m. Rare.
Eastern distribution.
Literature records.
Davis Strait: Cumberland Sound (Farlow 1879, as *Delesseria alata*).
Hudson Strait: Ungava Bay (Farlow 1886), Forbes Sound, False River Bay, and Koksoak River (Wilce 1959), Hudson Strait (Bell and MacFarlane 1933, as *D. alata*).
New records.
Davis Strait: Frobisher Bay *CANA 16978.*

Membranoptera denticulata (Montagne) Kylin
Kjellman 1883, p. 135, as *Delesseria montagnei;* Rosenvinge 1893, p. 802, fig. 12, as *D. montagnei;* Taylor 1957, p. 322, pl. 53, figs. 7-8.
At the 15-25 m depth in Hell Gate.
Eastern distribution.
Literature records.
Hell Gate: "Reindeer Cove" (Rosenvinge 1926).
Hudson Strait: Ungava Bay (Farlow 1886, as *Delesseria montagnei*), False River Bay and Koksoak River (Wilce 1959).
James Bay: James Bay (Setchell and Collins 1908, as *D. denticulata*).

Pantoneura angustissima (Turner) Kylin
Kjellman 1883, p. 134, as *Delesseria angustissima;* Taylor 1957, p. 320; Lamb and Zimmerman 1964, p. 234.
Eastern distribution.
Literature records.
Davis Strait: Koojesse Inlet (Lamb and Zimmerman 1964).

Pantoneura baerii (Postels and Ruprecht) Kylin
Kjellman 1883, p. 132, pl. 10, fig. 3, as *Delesseria baerii* and *D. corymbosa;* Rosenvinge 1893, p. 806, as *D. baerii;* Zinova 1955, p. 180, fig. 149; Taylor 1957, p. 320, pl. 44, fig. 6; Lund 1959, p. 220.
Within depths of 3 and 10 m on *Fucus distichus* and *Halosaccion ramentaceum.* Rare.
Eastern distribution.
Literature records.
Jones Sound: Craig Harbour (Lund 1933), northern Devon Island (Lamb and Zimmerman 1964).
Davis Strait: Cumberland Sound (Farlow 1879, as *Delesseria rostrata*).
Hudson Strait: Ungava Bay (Farlow 1886, as *D. baerii* and *D. corymbosa*), False River Bay and Koksoak River (Wilce 1959).
New records.
Hudson Strait: Negus Bay *2598.1,* Wakeham Bay *2632.*
Southwestern distribution.
New records.
Amundsen Gulf: Sachs Harbour *3366.*

Phycodrys rubens (Linnaeus) Batters
Kjellman 1883, p. 136, as *Delesseria sinuosa;* Rosenvinge 1893, p. 808; 1898, p. 27, as *D. sinuosa;* Zinova 1955, p. 185, figs. 154-157, as *Phycodrys sinuosa*; Taylor 1957, p. 323, pl. 30, fig. 8, pl. 42, fig. 1, pl. 46, fig. 1; Lund 1959, p. 221.
At depths of 2-25 m on rocks and other algae. The algal hosts were *Sphacelaria plumosa, Fucus distichus, Callophyllis cristata, Phyllophora truncata,* and *Odonthalia dentata.* Occasional. Some plants from the

southwestern region were of *P. rubens* var. *lingulata* (C. Agardh) Batters.

Eastern distribution.

Literature records.

Smith Sound: Rice Strait (Rosenvinge 1926).

Hell Gate: Lands End (Rosenvinge 1926).

Eclipse Sound: Pond Inlet (Wheldon 1947).

Hudson Strait: Ungava Bay (Farlow 1886, as *Delesseria sinuosa*), Forbes Sound, False River Bay, and Koksoak River (Wilce 1959), Hudson Strait (Bell and MacFarlane 1933, as *D. sinuosa*).

Hudson Bay: Churchill (Bell and MacFarlane 1938), Richmond Gulf (Howe 1927, as *Phycodrys sinuosa, CANA 4250*), Hudson Bay (Bell and MacFarlane 1933, as *D. sinuosa*).

James Bay: James Bay (Setchell and Gardner 1908, as *D. sinuosa*), Old Factory Bay (Howe 1927, as *P. sinuosa, CANA 4247*), Charlton Island (Howe 1927, as *P. sinuosa*; Bell and MacFarlane 1938, as *D. sinuosa*).

New records.

Robeson Channel: near Cape Rawson *9626.*

Jones Sound: Cape Skogn *9216.*

Prince Regent Inlet: Creswell Bay *8893.*

Gulf of Boothia: Netsiksiuvik Inlet *8738.*

Hudson Bay: Churchill *Crum 7645.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Bernard Harbour and Cockburn Point (Collins 1927a, as *D. sinuosa, CANA 4082*).

New records.

Rasmussen Basin: Peterson Bay *74-262B-15.*

Simpson Strait: Eta Island *8681, 9041.*

Queen Maud Gulf: Foggy Bay *8114,* near Minto Islands *8016.*

Dease Strait: Qikirtaarjuk Islands *7095.*

Coronation Gulf: Anchor Island *6917.*

Dolphin and Union Strait: Cockburn Point *8562.*

Amundsen Gulf: Gillet Bay *6745,* Police Point *6637,* Booth Island *6590.*

Northwestern distribution.

New records.

Barrow Strait: Allison Inlet *9365.*

Byam Channel: near Richardson Point *DH13-2,* near Robertson Point *DH22-2,* near Kay Point *DH25-4.*

Viscount Melville Sound: near Little Point *DH2S9-6.*

Wilkins Strait, south of: Brock Island *3166.*

Family Rhodomelaceae

Polysiphonia arctica J. Agardh

Kjellman 1883, p. 123; Rosenvinge 1893, p. 800; 1898, p. 25; Zinova 1955, p. 194, fig. 160; Taylor 1957, p. 338; Lund 1959, p. 223.

At the 2-30 m depth attached to rocks and loose-lying on mud substrates. Also growing on *Sphacelaria plumosa, Laminaria* haptera, *Fucus distichus,* and *Phyllophora truncata.* Frequent.

Eastern distribution.

Literature records.

Smith Sound: Pim Island (Rosenvinge 1926).

Jones Sound: Walrus Fjord (Rosenvinge 1926).

Hell Gate: "Hare Point", "Reindeer Cove", and Lands End (Rosenvinge 1926).

Fram Sound: Norfolk Inlet (Rosenvinge 1926).

Baffin Bay: Bethune Bay (Dickie 1871).

Davis Strait: Cumberland Sound (Dickie 1867; Farlow 1879, 1886).

Hudson Strait: Ungava Bay (Farlow 1886); Forbes Sound, False River Bay, and Koksoak River (Wilce 1959).

Hudson Bay: Richmond Gulf (Howe 1927, *CANA 4206*).

James Bay: Grey Goose Island (Howe 1927, *CANA 4205*).

New records.

Robeson Channel: near Cape Rawson *9627.*

Hall Basin: Distant Cape *9657.*

Kane Basin: Copes Bay *9703,* northern Pim Island *9583, 9612.*

Jones Sound: Cape Skogn *9221,* Boat Point *9177.*

Fram Sound: Rodberg Bay *9190.*

Bellot Strait: Fox Islands *8838.*

Hudson Strait: Westbourne Bay *2483,* Wakeham Bay *2631.*

Hudson Bay: Rankin Inlet *74-253A-11,* Eskimo Point *74-250-12,* Churchill *Crum 7649.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: Cockburn Point (Collins 1927a, *CANA 4086*).

New records.

Rasmussen Basin: Peterson Bay *74-262C-11.*

Simpson Strait: Eta Island *8658, 9042.*

Queen Maud Gulf: Royal Geographical Society Islands *8632,* Foggy Bay *8060,* near Minto Islands *8014.*

Dease Strait: Qikirtaarjuk Islands *7127.*

Coronation Gulf: Anchor Island *6974.*

Amundsen Gulf: Sachs Harbour *3340, 4641,* Booth Island *6605.*

Northwestern distribution.

Literature records.

Crozier Channel: Manson Point and Mould Bay (Lee 1966).

New records.

Belcher Channel: Cape Ursula *9731.*

Queens Channel: Milne Island *9098.*

Wellington Channel: Snowblind Bay *9144.*

Barrow Strait: near Cape Dungeness *9520.*

Austin Channel: near Langley Point *9349.*

Byam Martin Channel: near Burnett Point *DH11S3-1.*

Byam Channel: near Richardson Point *DH13-4,* near Robertson Point *DH7-15, DH15-6,* near Kay Point *DH5-4, DH25-1.*

Viscount Melville Sound: Nelson Griffiths Point *DH8-7,* near Little Point *DH2S2-2, DH9-2.*

Hecla and Griper Bay: Cape Fisher *3094.2.*

Crozier Channel: Manson Point *3134.*

Beaufort Sea: Cape Prince Alfred *3073.1.*

Polysiphonia urceolata (Lightfoot) Greville

Kjellman 1883, p. 118; Rosenvinge 1893, p. 797; Zinova 1955, p. 190, figs. 158-159; Taylor 1957, p. 337; Lund 1959, p. 223.

The Charlton Island specimens were at the 5 m depth.

Eastern distribution.

Literature records.

Eclipse Sound: Pond Inlet (Bell and MacFarlane 1938).

Hudson Strait: Forbes Sound and False River Bay (Wilce 1959), Hudson Strait (Bell and MacFarlane 1933).

Hudson Bay: Hudson Bay (Bell and MacFarlane 1933).

James Bay: Charlton Island (Howe 1927, *CANA 4208*).

Northwestern distribution.

Literature records.

Viscount Melville Sound: Cape Cockburn (Harvey 1858).

Rhodomela confervoides (Hudson) Silva

Kjellman 1883, p. 112, pl. 8, as *R. subfusca;* Waern 1952, p. 225, figs. 94-95, as *R. subfusca;* Zinova 1955, p. 199, figs. 164-165, as *R. subfusca;* Taylor 1957, p. 344, pl. 40, fig. 9.

On rocks at the 4-8 m depth. Rare.

Eastern distribution.

Literature records.

Davis Strait: Cumberland Sound (Dickie 1867, Farlow 1879; both as *Rhodomela subfusca*).

Hudson Strait: Ungava Bay (Wilce 1959), Wakeham Bay (Bell and MacFarlane 1938, as *R. subfusca*), Hudson Strait (Bell and MacFarlane 1933, as *R. subfusca*).

Hudson Bay: Hudson Bay (Bell and MacFarlane 1933, as *R. subfusca*).

New records.

Hudson Strait: Westbourne Bay *2517.2.*

Rhodomela lycopodioides (Linnaeus) C. Agardh

Kjellman 1883, p. 107, pl. 9, pl. 10, figs. 1-2; Rosenvinge 1893, p. 796; 1898, p. 24, fig. 4; Zinova 1955, p. 201, figs. 166-167; Taylor 1957, p. 344; Lund 1959, p. 226.

At depths of 2-35 m on rocks, less commonly on other algae, such as *Sphacelaria plumosa, Laminaria solidungula* (holdfast), *Fucus distichus*, and *Phyllophora truncata.* Also loose-lying on mud substrates. Frequent. Besides *R. lycopodioides* f. *lycopodioides,* including the associated subf. *tenera* Kjellman, also present was *R. lycopodioides* f. *flagellaris* Kjellman.

Eastern distribution.

Literature records.

Jones Sound: Craig Harbour (Lund 1933).

Baffin Bay: Bethune Bay (Dickie 1871).

Davis Strait: Cumberland Sound (Farlow 1879, as *Rhodomela tenuissima*).

Hudson Strait: Ungava Bay (Farlow 1886, as *R. lycopodioides* var. *tenuissima*), Forbes Sound, False River Bay, and Koksoak River (Wilce 1959, as *R. lycopodioides* f. *flagellaris*).

Hudson Bay: between Otaska Harbour and Black Whale Harbour (Howe 1927, *CANA 4171*).

James Bay: James Bay (Setchell and Collins 1908, as *R. lycopodioides* f.

tenuissima and *R. lycopodioides* f. *flagellaris*), Grey Goose Island and Charlton Island (Howe 1927, *CANA 4167* and *4166*).

New records.

Jones Sound: Cape Skogn *9220.*

Prince Regent Inlet: Creswell Bay *8873.*

Eclipse Sound: near Pond Inlet *2679.*

Hudson Strait: Wakeham Bay *2635.*

Hudson Bay: Rankin Inlet *74-253A-6,* Eskimo Point *74-250-18.*

James Bay: Swan River *CANA 4804.*

Southwestern distribution.

Literature records.

Dolphin and Union Strait: "Kimiryuak River" in Simpson Bay (Collins 1927a, *CANA 4039*).

New records.

St. Roch Basin: Peel Inlet *8987.*

Rasmussen Basin: Peterson Bay *74-262B-8.*

Simpson Strait: Eta Island *8660, 9045.*

Queen Maud Gulf: Royal Geographical Society Islands *8605,* Enterprise Point *7906,* Anderson Bay *8228, 8462,* Foggy Bay *8145,* near Minto Islands *8018.*

Dease Strait: Starvation Cove *7263,* Qikirtaarjuk Islands *7148.*

Melville Sound: Hurd Islands *8364.*

Bathurst Inlet: Cape Croker *8493,* Buchan Bay *8537.*

Coronation Gulf: Anchor Island *6991.*

Dolphin and Union Strait: Cockburn Point *8557.*

Amundsen Gulf: De Salis Bay *4565,* Sachs Harbour *3354.1,* Duck Hawk Bluff *4622,* Pearce Point *4435,* Gillet Bay *6800,* Police Point *4239, 6664,* Booth Island *6622.*

Northwestern distribution.

Literature records.

Crozier Channel: Mould Bay (Lee 1966).

New records.

Barrow Strait: near Cape Dungeness *9521,* Assistance Bay *9507,* Allison Inlet *9370.*

McDougall Sound: Brooman Point *9260.*

Byam Channel: near Robertson Point *DH7, DH15-8.*

Viscount Melville Sound: near Little Point *DH2S7-10, DH2S9-13.*

Hecla and Griper Bay: Cape Fisher *3102.2.*

Kellett Strait: near Pedder Point *3086.*

Crozier Channel: Manson Point *3146.*

Beaufort Sea: Cape Prince Alfred *3075.5.*

Odonthalia dentata (Linnaeus) Lyngbye

Kjellman 1883, p. 105; Zinova 1955, p. 203, figs. 168-169; Taylor 1957, p. 346, pl. 60, figs. 4-6.

At 15 m to shallower depths on rocks. Also loose-lying on mud substrates. Occasional.

Eastern distribution.

Literature records.*

Jones Sound: Cape Vera (Rosenvinge 1926).

Davis Strait: Cumberland Sound (Dickie 1867, Farlow 1879).

Hudson Strait: Ungava Bay (Farlow 1886), Forbes Sound, False River Bay, and Koksoak River (Wilce 1959), Hudson Strait (Bell and MacFarlane 1933).

Hudson Bay: Depot Island (Setchell and Collins 1908), between Otaska Harbour and Black Whale Harbour (Howe 1927, *CANA 4210*), Hudson Bay (Bell and MacFarlane 1933).

James Bay: Grey Goose Island (Howe 1927, *CANA 4212;* Bell and MacFarlane 1938).

New records.

Jones Sound: Cape Skogn *9206.*

Prince Regent Inlet: Creswell Bay *8864.*

Bellot Strait: Fox Islands *8856.*

Hudson Bay: Eskimo Point *74-250-29,* Churchill *Crum 7642.*

James Bay: Swan River *CANA 4805.*

Southwestern distribution.

New records.

St. Roch Basin: Peel Inlet *8972.*

Rasmussen Basin: Peterson Bay *74-262C-7.*

Simpson Strait: Eta Island *9021.*

Victoria Strait: Victory Point *8958.*

Queen Maud Gulf: Royal Geographical Society Islands *8622,* Foggy Bay *8087,* near Minto Islands *7956.*

Dolphin and Union Strait: Cockburn Point *8552.*

Amundsen Gulf: Pearce Point *4479,* Gillet Bay *6744,* Police Point *4341,* Booth Island *6528.*

Northwestern distribution.

New records.

Byam Channel: near Robertson Point *DH22-1.*

Viscount Melville Sound: Nelson Griffiths Point *DH8-5.*

Beaufort Sea: Cape Prince Alfred *3065.*

* *CANA 4194* from Hudson Bay (between Otaska and Black Whale Harbours) identified by Howe (1927) as *Odonthalia floccosa* appears to be *Rhodomela lycopodioides.*

As in the species distribution records, the locations below are in a general north to south and east to west arrangement within each region. Positions of latitude and longitude related to the present survey approximate the site of collection within each location as much as possible. The place names are according to the 1968 editions of Volumes 2 and 3 of the *Arctic Pilot of Canada* and current hydrographic chart publications of the Canadian Hydrographic Service.

Eastern region.

Robeson Channel:

Cape Sheridan. Northwestern entrance point of Robeson Channel, Ellesmere Island; 82° 28' N. 61° 26' W.

Floeberg Beach. About 4 km southeastward of Cape Sheridan, Ellesmere Island; 82° 26' N. 61° 25' W.

Cape Rawson. About 6.5 km southeastward of Cape Sheridan, Ellesmere Island. The collection site was midway between Cape Rawson and Black Cape; 82° 24' N. 61° 10' W. *Present survey.*

Hall Basin:

Distant Cape. Northern entrance to Lady Franklin Bay, Ellesmere Island; 81° 43' N. 64° 30' W. *Present survey.*

Discovery Harbour. In Lady Franklin Bay, westward of Distant Cape, Ellesmere Island; 81° 43.5' N. 64° 47' W. *Present survey.*

Kennedy Channel:

Rawlings Bay. In the southern part of Kennedy Channel, Ellesmere Island; 80° 16' N. 70° 12' W.

Kane Basin:

Norman Lockyer Island. A small island at the mouth of Franklin Pierce Bay, Ellesmere Island; 79° 23.4' N. 74° 46' W. *Present survey.*

Copes Bay. Northwestern arm of Princess Marie Bay, Ellesmere Island; 79° 26' N. 76° 10' W. *Present survey.*

Hayes Fjord. Large western arm of Buchanan Bay, Ellesmere Island; 78° 58' N. 75° 10' W.

Alexandra Fjord. At the south side of Buchanan Bay, Ellesmere Island; 78° 55' N. 76° 00' W.

Pim Island. Between Kane Basin and Smith Sound opposite Johan Peninsula, Ellesmere Island; 78° 44' N. 74° 25' W. *Present survey.*

Smith Sound:

Rice Strait. Narrow passage separating Pim Island from Ellesmere Island; 78° 45' N. 74° 46' W.

Fram Haven. Small bay in Rice Strait, Ellesmere Island; 78° 47' N. 74° 46' W.

Jones Sound:

Craig Harbour. At the tip of a prominent peninsula near the entrance to Jones Sound, Ellesmere Island. 76° 11' N. 81° 02' W.

Fram Fjord. A small inlet between Craig Harbour and Starnes Fjord, Ellesmere Island; 76° 29' N. 81° 15' W.

Harbour Fjord. Between Lindstrom Peninsula and Heim Peninsula, Ellesmere Island; 76° 33' N. 84° 14' W.

Muskox Fjord. In the western part of Jones Sound, Ellesmere Island; 76° 31' N. 87° 41' W.

Goose Fjord. A deep inlet in the western part of Jones Sound, Ellesmere Island; 76° 35' N. 88° 36' W.

Walrus Fjord. A large inlet just west of Goose Fjord, Ellesmere Island; 76° 30' N. 88° 50' W.

Bay of Woe. At the northwestern entrance to Jones Sound, Ellesmere Island; 76° 27' N. 89° 07' W.

Cape Skogn. Near the eastern extremity of Bear Bay, Devon Island; 75° 46' N. 84° 13' W. *Present survey.*

Cape Newman Smith. Eastern side of Bear Bay. The collection was made south of the western entrance of an unnamed bay with Cape Newman Smith forming the eastern entrance, Devon Island; 75° 35' N. 85° 33' W. *Present survey.*

West Fjord. Large inlet at the western face of Jones Sound, Devon Island; 76° 05' N. 90° 00' W.

Boat Point. The southern entrance point to West Fjord, Devon Island; 76° 00.8' N. 90° 04' W. *Present survey.*

Cape Vera. Eastern tip of Colin Archer Peninsula, Devon Island; 76° 13' N. 89° 14' W.

Fram Sound:

Rodberg Bay. A large bay indentating the southeastern face of North Kent Island; 76° 29.5' N. 89° 51' W. *Present survey.*

Norfolk Inlet. The northwestern arm of

Fram Sound, Devon Island; 76° 29' N. 91° 00' W.

Hell Gate:
Cross Bay. At the southeast side of Hell Gate, Ellesmere Island; 76° 33' N. 89° 32' W.
Lands End. The northeastern entrance point to Hell Gate, Ellesmere Island; 76° 51' N. 89° 30' W.

Cardigan Strait:
Devil Island. A small island in the southwestern part of the strait; 76° 30' N. 90° 30' W.

Lancaster Sound:
Dundas Harbour. Near the northeastern entrance to the sound, Devon Island; 74° 32' N. 82° 27' W.

Adams Sound:
Arctic Bay. On the north shore of the sound, Baffin Island; 73° 01' N. 85° 09' W. *Present survey.*

Prince Regent Inlet:
Creswell Bay. Large bay on the west side of the inlet, Somerset Island; 72° 43.5' N. 93° 48' W. *Present survey.*

Bellot Strait:
Port Kennedy. A narrow inlet at the northeastern side of the strait, Somerset Island. 72° 02' N. 94° 19' W.
Fox Islands. In the eastern portion of the strait. The collection was made on the larger island; 72° 43.5' N. 93° 48' W. *Present survey.*
Brands Island. At the southeastern entrance to the strait. The collection was made in the inlet across the island on Boothia Peninsula; 71° 58.9' N. 94° 27.4' W. *Present survey.*

Gulf of Boothia:
Victoria Harbour. West side of the gulf on the Boothia Peninsula; 70° 09' N. 91° 33' W. *Present survey.*
Netsiksiuvik Inlet. West side of the gulf in Lord Mayor Bay, Boothia Peninsula; 69° 42.5' N. 92° 45' W. *Present survey.*
St. Peter Bay. East side of Pelly Bay on the Simpson Peninsula; 68° 32' N. 89° 51' W. *Present survey.*

Eclipse Sound:
Pond Inlet settlement. At the southeastern entrance point to the inlet. Collections were made at the settlement and west of it; 72° 42' N. 77° 51' W. *Present survey.*

Baffin Bay:
Bethune Inlet. Between Philpots Island and Devon Island; 74° 52' N. 80° 20' W.
Cape Bowen. Southeastward of Pond Inlet, Baffin Island; 72° 34' N. 75° 31' W.
Cape Adair. Southwestern part of the bay, Baffin Island; 71° 24' N. 71° 13' W.
Clyde Inlet. Southwestern corner of the bay, Baffin Island; 70° 27' N. 68° 33' W.

Davis Strait:
Exeter Sound: At the easternmost extremity of Baffin Island; 66° 12' N. 62° 00' W.
Cumberland Sound. The largest inlet on the west coast of Baffin Island; 65° 20' N. 66° 00' W.
Pangnirtung. Settlement on the northeastern side of Cumberland Sound; 66° 08' N. 65° 44' W.
Frobisher Bay. Large bay at the southeastern part of Baffin Island; 62° 40' N. 66° 20' W.
Koojesse Inlet. At the head of Frobisher Bay; 63° 44' N. 68° 32' W.

Hudson Strait:
Resolution Island. At the northeastern entrance to the strait; 61° 33' N. 65° 00' W.
Port Harvey. Part of the channel that separates Bush Island from Killinek Island at the southeastern entrance to the strait; 60° 28.7' N. 64° 42' W.
Ungava Bay. Extensive bay at the eastern entrance of the strait; 60° 00' N. 67° 10' W.
Forbes Sound. Northeastern part of Ungava Bay between Killinek Island and the mainland; 60° 23' N. 64° 50' W.
False River. At the southern part of Ungava Bay; 58° 30' N. 67° 50' W.
Koksoak River. At the southern part of Ungava Bay west of False River; 58° 34' N. 68° 09' W.
Westbourne Bay. At the northern side of the strait in North Bay; 62° 49' N. 69° 50' W. *Present survey.*
Ashe Inlet. At the south shore of Big Island, north side of the strait; 62° 32' N. 70° 34' W.
Negus Bay. At the northwestern part of the strait; 64° 17' N. 72° 22' W. *Present survey.*
Wakeham Bay. At the southern side of the

strait; 61° 39' N. 72° 00' W. *Present survey.*

Deception Bay. At the southwestern side of the strait; 62° 11' N. 74° 45' W.

Sugluk Inlet. At the southwestern side of the strait; 62° 12.5' N. 75° 39' W. *Present survey.*

Cape Wolstenholme. The southwestern entrance point to the strait; 62° 36' N. 77° 31' W.

Foxe Channel:

Stanley Harbour. At the northeastern coast of Southampton Island; 64° 42' N. 82° 12' W. *Present survey.*

Repulse Bay:

Talun Bay. At the northern shore of the bay, Melville Peninsula; 66° 31' N. 86° 14' W. *Present survey.*

Hudson Bay:

Southampton Island. Large island between Foxe Basin and Hudson Bay; 64° 30' N. 84° 00' W.

South Bay. At the south shore of Southampton Island; 63° 54' N. 83° 24' W.

Munn Bay. At the head of South Bay, Southampton Island; 64° 06' N. 83° 17' W. *Present survey.*

Ivugivik Harbour. Close to the northeastern entrance point of the bay; 62° 25.5' N. 77° 54.8' W. *Present survey.*

Richmond Gulf. At the eastern side of the bay; 56° 14' N. 76° 15' W. Great Whale River. At the southeastern region of the bay; 55° 15' N. 77° 45' W.

Otaska Harbour. At the southeastern region of the bay; 55° 04' N. 78° 16' W.

Long Island Sound. Between Long Island and the mainland, near the eastern entrance to James Bay; 54° 48' N. 79° 23' W.

Depot Island. At the northwestern corner of the bay; 63° 48' N. 89° 52' W.

Chesterfield Inlet. A settlement at the northwestern side of the bay; 63° 20' N. 90° 43' W.

Rankin Inlet. At the northwestern side of the bay; 62° 46' N. 90° 17' W. *Present survey.*

Eskimo Point. At the northwestern side of the bay; 61° 06' N. 94° 02' W. *Present survey.*

Churchill. A settlement at the mouth of Churchill River at the western side of the bay; 58° 46' N. 94° 04' W.

James Bay:

Grey Goose Island. In the northeastern region of the bay; 53° 55' N. 79° 54' W.

Old Factory Bay. At the eastern side of the bay; 52° 36' N. 78° 45' W.

Charlton Island. Large island in the southern part of the bay; 52° 00' N. 79° 28' W.

Moose River. In the southern portion of the bay; 51° 20' N. 80° 25' W.

Swan River. At the western side of the bay; 53° 36' N. 82° 14' W.

Ekwan River. At the western side of the bay opposite Akimiski Island; 53° 12' N. 82° 13' W. *Present survey.*

Halfway Point. At the southwestern side of the bay; 51° 52' N. 80° 49' W.

Southwestern region.

St. Roch Basin:

Spence Bay. On the Boothia Peninsula; 69° 31' N. 93° 34' W. *Present survey.*

Peel Inlet. On King William Island; 69° 13' N. 96° 09' W. *Present survey.*

Rasmussen Basin:

Peterson Bay. On King William Island; 68° 37; N. 95° 53' W. *Present survey.*

Simpson Strait:

Eta Island. Large island in the narrow portion of the strait; 68° 32.4' N. 97° 23.2' W. *Present survey.*

M'Clintock Bay. On King William Island; 67° 39.3' N. 97° 44.7' W. *Present survey.*

Victoria Strait:

Victory Point. Northern extremity of Back Bay, King William Island; 69° 38.5' N. 98° 22' W. *Present survey.*

Cape Jane Franklin. In Back Bay, King William Island; 69° 37' N. 98° 22' W. *Present survey.*

Franklin Point. Southern extremity of Back Bay, leading into Collinson Inlet, King William Island. 69° 34.5' N. 98° 33' W. *Present survey.*

Queen Maud Gulf:

Royal Geographical Society Islands. A collection was made on the largest island of the group, which lies in the southern entrance to Victoria Strait; 68° 42' N. 100° 23' W. *Present survey.*

Enterprise Point. The western entrance to Parker Bay, Victoria Island; 68° 47' N. 103° 18' W. *Present survey.*

Anderson Bay. On Victoria Island; 68° 56' N. 104° 22' W. *Present survey.*

Foggy Bay. South of Melbourne Island on the southwestern portion of the gulf; 68° 19' N. 104° 47.5' W. *Present survey.*

Minto Islands. In the southwestern part of the gulf. The collection was made opposite the Minto Islands between the Beaufort River and Cape Roxborough; 68° 35.8' N. 105° 25.5' W. *Present survey.*

Dease Strait:

Starvation Cove. On Victoria Island in the eastern portion of the strait; 69° 09.3' N. 106° 00' W. *Present survey.*

Qikirtaarjuk Islands. In the Finlayson Islands, eastern section of the strait; 68° 58.9' N. 105° 49.9' W. *Present survey.*

Duncan Island. In the Finlayson Islands. The collection was made on an unnamed island east of Duncan Island; 69° 06.7' N. 105° 54' W. *Present survey.*

Wellington Bay. Large bay on Victoria Island in the eastern portion of the strait; 69° 18' N. 106° 30' W.

Elu Inlet:

Unnamed island. An island in the southeastern corner of the inlet; 68° 30' N. 105° 43' W. *Present survey.*

Melville Sound:

Kuururjuak Point. The tip of the peninsula between Warrender Bay and Elu Island; 68° 17.5' N. 106° 31' W. *Present survey.*

Hurd Islands. The collection was made on the largest island; 68° 12.3' N. 107° 16' W. *Present survey.*

Bathurst Inlet:

Cape Croker. At the northeastern entrance to the inlet; 68° 06.4' N. 107° 50.3' W. *Present survey.*

Buchan Bay. Southward of Cape Croker; 67° 56.3' N. 107° 41.8' W. *Present survey.*

Detention Harbour. Southward of the northwestern entrance to the inlet; 67° 51' N. 109° 56' W.

Coronation Gulf:

Anchor Island. In the Duke of York Archipelago; 68° 09' N. 112° 47' W. *Present survey.*

Dolphin and Union Strait:

Austin Bay. Close to the eastern entrance of the strait at Lady Franklin Point, Victoria Island; 68° 32' N. 113° 10' W.

Simpson Bay. A wide bay on the Victoria Island coast; 69° 05' N. 114° 10' W.

Bernard Harbour. On the southeastern shore of the strait; 68° 44.7' N. 114° 42.5' W. *Present survey.*

Cockburn Point. West of Bernard Harbour; 68° 52.7' N. 115° 02.5' W. *Present survey.*

Stapylton Bay. About midway along the south shore of the strait; 68° 53' N. 116° 10' W.

Cape Young. West of Stapylton Bay; 68° 57' N. 117° 00' W.

Prince of Wales Strait:

Princess Royal Islands. About midway in the strait; 72° 45.6' N. 118° 06.5' W. *Present survey.*

Berkeley Point. The southeastern entrance point of the strait, Victoria Island; 71° 35' N. 118° 51' W. *Present survey.*

Amundsen Gulf:

Cape Ptarmigan. Western point of the peninsula between Minto Inlet and Prince Albert Sound, Victoria Island; 71° 00' N. 118° 22' W. *Present survey.*

Prince Albert Sound. A large sound on Victoria Island; 70° 32' N. 116° 38' W. *Present survey.*

De Salis Bay. On the southeastern shore of Banks Island; 71° 26' N. 121° 36' W. *Present survey.*

Thesiger Bay. The shallow indentation of the southwestern coast of Banks Island; 71° 59' N. 125° 05' W. *Present survey.*

Sachs Harbour. At the southwestern part of Banks Island; 71° 58' N. 125° 08' W. *Present survey.*

Duck Hawk Bluff. About 5 km west of Sachs Harbour; 71° 57.5' N. 125° 34' W. *Present survey.*

Cape Kellett. Low spit at the southwest part of Banks Island; 71° 58' N. 126° 00' W.

Pearce Point. At the south shore of the gulf; 69° 49' N. 122° 44.6' W. *Present survey.*

Gillet Bay. At the south shore of the gulf in the Parry Peninsula; 70° 10.9' N. 124° 30.3' W. *Present survey.*

Police Point. At the south shore of the gulf on the Parry Peninsula; 70° 10.9' N. 124° 45.3' W. *Present survey.*

Booth Island. West of Police Point in

Franklin Bay; 70° 07.7' N. 125° 08.4' W. *Present survey.*

Point Stivens. On the Parry Peninsula in the southeastern section of Franklin Bay; 69° 35' N. 125° 30' W.

Kugmallit Bay:

Tuktoyaktuk. A settlement in the eastern part of the bay. A collection was made southwest of the harbour; 69° 25.7' N. 133° 02.9' W. *Present survey.*

Mackenzie Bay:

Herschel Island. In the northwestern part of the bay; 69° 35' N. 139° 02' W.

Northwestern region.

Lincoln Sea:

Cape Hecla. At the northwestern entrance to James Ross Bay, Ellesmere Island, 82° 55.5' N. 64° 45' W. *Present survey.*

Alert. In Dumbell Bay at northeastern Ellesmere Island; 82° 30' N. 62° 20' W.

Mushroom Point. About 6 km east of Alert; 82° 30' N. 61° 56' W.

Nanson Sound:

Cape St. Andrew. The south entrance point to Otto Fjord, Ellesmere Island; 80° 54.6' N. 89° 24' W. *Present survey.*

Butter Porridge Point. In the southeastern part of the sound on the Schei Peninsula, Axel Heiberg Island. Collections were made west of the point; 80° 25' N. 87° 48' W. *Present survey.*

Sverdrup Channel:

Expedition Fjord. An eastern arm of Strand Bay, Axel Heiberg Island; 79° 20.5' N. 92° 08' W. *Present survey.*

East Fjord. A northern arm of Strand Bay, Axel Heiberg Island; 79° 20.5' N. 93° 37' W. *Present survey.*

Norwegian Bay:

Lands End. The northeastern entrance to Hell Gate, Ellesmere Island. A collection was made 1 km north of here; 76° 51.5' N. 89° 30' W. *Present survey.*

Belcher Channel:

Cape Ursula. On the eastern face of Table Island; 77° 11' N. 95° 12' W. *Present survey.*

Penny Strait:

Russell Island. In the northeastern portion of the strait. A collection was made opposite the island on the Grinnell Peninsula, Devon Island; 76° 54' N. 96° 55' W. *Present survey.*

Northumberland Sound: In the northeastern part of the strait on the Grinnell Peninsula, Devon Island; 76° 50' N. 96° 50' W.

Hungry Bay. On the southwest coast of Grinnell Peninsula, Devon Island; 76° 35' N. 96° 05' W.

Queens Channel:

Cape Becher. On the Sheills Peninsula, south coast of Grinnell Peninsula, Devon Island; 76° 14' N. 95° 20' W. *Present survey.*

Milne Island. An island lying between Queens Channel and McDougall Sound: 75° 39' N. 96° 43' W. *Present survey.*

Wellington Channel:

Porden Point. At the north coast of the channel on Grinnell Peninsula, Devon Island; 76° 16' N. 93° 40' W. *Present survey.*

John Brown Point. About midway of the eastern side of the channel, Devon Island; 75° 35.3' N. 92° 02' W. *Present survey.*

Emery Bay. South of John Brown Point, Devon Island; 75° 13' N. 92° 32' W. *Present survey.*

Snowblind Bay. Directly west of Emery Bay on Cornwallis Island; 75° 13' N. 93° 30' W. *Present survey.*

Barrow Strait:

Rigby Bay. In the northeastern section of the strait on Devon Island; 74° 33' N. 89° 58.8' W. *Present survey.*

Radstock Bay. In the northeastern section of the strait on Devon Island; 74° 41.7' N. 91° 12' W. *Present survey.*

Beechey Island. In the northeastern section of the strait on Devon Island; 74° 44' N. 91° 55' W.

Erebus Bay. A bay partially formed by Beechey Island at the southwestern part of Devon Island; 74° 43' N. 91° 47' W.

Union Bay. A bay partially formed by Beechey Island at the southwestern part of Devon Island; 74° 44' N. 91° 56' W.

Cape Dungeness. Near the entrance to Wellington Channel on Cornwallis Island. A collection was made about 6 km west of the cape; 74° 39' N. 93° 56'

W. *Present survey.*

Assistance Bay. On the north side of the strait on Cornwallis Island; 74° 39' N. 94° 19' W. *Present survey.*

Cunningham Inlet. On the south side of the strait on Somerset Island; 74° 08' N. 93° 55' W. *Present survey.*

Intrepid Bay. In Resolute Passage on the southwestern coast of Cornwallis Island; 74° 57' N. 96° 09' W. *Present survey.*

Allison Inlet. In Intrepid Passage on Bathurst Island; 75° 00' N. 99° 24' W. *Present survey.*

McDougall Sound:

Templeton Bay. At the southeastern coast of Little Cornwallis Island. A collection was made in a bay 9 km southwest of Templeton Bay; 75° 26' N. 96° 37' W. *Present survey.*

Brooman Point. The southern extremity of a long peninsula on Bathurst Island. A collection was made about 13 km north of the point on the western side of the peninsula; 75° 30' N. 97° 33' W. *Present survey.*

Freemans Cove. At the southwestern entrance to the sound on Bathurst Island; 75° 11.5' N. 98° 03' W. *Present survey.*

Austin Channel:

Hooker Bay. At the southern entrance to Graham Moore Bay, Bathurst Island; 75° 25' N. 100° 33' W. *Present survey.*

Langley Point. On Byam Martin Island. A collection was made 19 km north of the point; 75° 22' N. 103° 48' W. *Present survey.*

Byam Martin Channel:

Maori Point. The western entrance point to Weatherall Bay, Melville Island; 76° 02.2' N. 107° 42' W. *Present survey.*

Towson Point. On Melville Island at the narrow portion of the channel. A collection was made about 8 km north of the point; 75° 57' N. 105° 32.5' W. *Present survey.*

Burnett Point. South of Towson Point on Melville Island. A collection was made about 2 km north of the point; 75° 44.2' N. 105° 22' W. *Present survey.*

Byam Channel:

Richardson Point. The northwest entrance point of the channel; 75° 32.5' N. 105° 30' W. *Present survey.*

Consett Head. About midway of the channel on Melville Island; 75° 19' N. 105° 40' W. *Present survey.*

Robertson Point. South of Consett Head on Melville Island. Collections were made off the point and about 5 km south near an unnamed point; 75° 09' N. 105° 51' W. *Present survey.*

Kay Point. The southwestern tip of Byam Martin Island. A collection was made about 5 km north of here; 75° 11' N. 104° 52' W. *Present survey.*

Viscount Melville Sound:

Cape Cockburn. The southwestern tip of Bathurst Island; 75° 03' N. 100° 20' W.

Nelson Griffiths Point. The southwestern entrance point to Byam Channel, Melville Island; 75° 03' N. 105° 58' W. *Present survey.*

Little Point. South of Nelson Griffiths Point. Collections were made about 10 km southward of the point; 75° 01.5' N. 106° 32' W. *Present survey.*

Barnard Point. The northeastern entrance to Richard Collinson Inlet, Victoria Island; 73° 00' N. 113° 10' W. *Present survey.*

Wilkens Strait:

Brock Island. A collection was made in the unnamed channel south of Wilkens Strait between Brock Island and Mackenzie King Island; 71° 51' N. 113° 36' W. *Present survey.*

Hecla and Griper Bay:

Cape Fisher. On the west side of the bay, Melville Island; 75° 49.4' N. 111° 26' W. *Present survey.*

Kellett Strait:

Pedder Point. The southeastern extremity of Eglington Island. A collection was made north of the point; 75° 30.8' N. 118° 31' W. *Present survey.*

Crozier Channel:

Manson Point. The eastern entrance point to Mould Bay, Prince Patrick Island; 76° 05' N. 119° 04' W. *Present survey.*

Mould Bay. At Prince Patrick Island; 76° 13' N. 119° 23' W. *Present survey.*

M'Clure Strait:

Cape Mecham. The western entrance point to Walker Inlet, Prince Patrick Island; 75° 44' N. 121° 01' W. *Present survey.*

Beaufort Sea:

Cape Prince Alfred. The northwestern extremity of Bank Island; 74° 20.3' N. 124° 44' W. *Present survey.*

Peninsula, Devon Island; 76° 50' N. 96° 50' W.

Adey, W.H.
(1965) The genus *Clathromorphum* (Corallinaceae) in the Gulf of Maine. Hydrobiologia 26(3-4): 539-573.

Adey, W.H.
(1966) The genera *Lithothamnium, Leptophytum* (nov. gen.) and *Phymatolithon* in the Gulf of Maine. Hydrobiologia 28(3-4): 321-370.

Ashmead, S.
(1864) Algae. Page 96 *in* E. Durand, T.P. James and S. Ashmead, Enumeration of the arctic plants collected by Dr. I.I. Hayes in his exploration of Smith's Sound, between parallels 78th and 82nd, during the months of July, August and the beginning of September, 1861. Proc. Acad. Nat. Sci. Philadelphia 1863: 93-96.

Bell, H.P. and C. MacFarlane.
(1933) Biological and oceanographic conditions in Hudson Bay. 10. Marine Algae from Hudson Bay. Contr. Canadian Biol. Fish. 8(3): 63-69.

Bell, H.P. and C. MacFarlane.
(1938) Some marine algae from Labrador, Hudson Bay, and arctic Canada. Canadian Field Nat. 52(1): 9-10.

Bliding, C.
(1963) A critical survey of European taxa in Ulvales. Part I. *Capsosiphon, Percursaria, Blidingia, Enteromorpha*. Opera Botan. 8, No. 3.

Bliding, C.
(1968) A critical survey of European taxa in Ulvales. Part II. *Ulva, Ulvaria, Monostroma, Kornmannia*. Botan. Not. 121(4): 535-629.

Børgesen, F.
(1902) Marine Algae. Botany of the Faröes 2: 339-532.

Børgesen, F. (1925)
Marine algae from the Canary Islands especially from Teneriffe and Gran Canaria. I. Chlorophyceae. Kgl. Danske Vidensk. Selskab. Biol. Medd. Vol. 5, No. 3.

Bristol, B.M.
(1920) A review of the genus *Chlorochytrium*, Cohn J. Linn. Soc. (Botany) 45: 1-28.

Cardinal, A.
(1964) Étude sur les Ectocarpacées de la Manche. Bieh. Nova Hedw. No. 15.

Collins, F.S.
(1908) Notes on algae IX. Rhodora 10(117): 155-164.

Collins, F.S.
(1927a) Marine algae from Bering Strait and Arctic Ocean collected by the Canadian Arctic Expedition, 1913-1916. Rep. Canadian Arctic Exp. 1913-1918, 6 (Botany, Part B): 1-16.

Collins, F.S.
(1927b) Algae of the Neptune Expedition. Rep. Canadian Arctic Exp. 1913-1918, 6 (Botany, Part B): 29.

Croall, A.
(1868) Marine algae. Pages 456-462 in R. Brown, Florula Discoana: Contributions to the phyto-geography of Greenland, within the parallels of 68° and 70° north latitude. Trans. Bot. Soc. (Edinburgh) 9: 430-465.

Dickie, G.
(1852) Notes on the algae. Pages CXCI-CC *in* P.C. Sutherland, Journal of a voyage in Baffin's Bay and Barrow Straits, in the years 1850-1851, performed by H.M. Ships "Lady Franklin" and "Sophia" under the command of Mr. William Penny, in search of the missing crews of H.M. Ships "Erebus" and "Terror" ... London: Longman, Brown, Green and Longmans. Vol. II, Appendix.

Dickie, G.
(1853) Notes on the flowering plants and algae, collected during the voyage of the "Isabel". Pages 133-144 *in* E.A. Inglefield, A summer search for Sir John Franklin; with a peep into the polar basin. Thomas Harrison, London.

Dickie, G.
(1861) Algae. Page 86 *in* J.D. Hooker, An account of the plants collected by Dr. Walker in Greenland and Arctic America during the expedition of Sir Francis M'Clintock, R.N., in the yacht "Fox". J. Proc. Linn. Soc. (Bot.) 5: 79-88.

Dickie, G.
(1867) Notes on a collection of algae procured in Cumberland Sound by Mr. James

Taylor, and remarks on arctic species in general. J. Linn. Soc. (Bot.) 9: 235-243.

Dickie, G.
(1871) Notes on a collection of plants from the north-east shore of Lancaster Sound. J. Linn. Soc. (Bot.) 11: 32-35.

Dickie, G.
(1878) On the algae found during the arctic expedition. J. Linn. Soc. (Bot.) 17(98): 6-12. (Also in abbreviated form by Dickie, G. 1878. Algae and Diatomaceae. Pages 323-326 *in* G.S. Nares, Narrative of a voyage to the Polar Sea during 1875-6 in H.M. Ships "Alert" and "Discovery", with notes on the natural history edited by H.W. Feilden. Vol. 2. London.)

Druehl, L.D.
(1968) Taxonomy and distribution of northeast Pacific species of *Laminaria*. Canadian J. Bot. 46(5): 539-547.

Edelstein, T.
(1972) *Halosacciocolax lundii*, sp. nov., a new red alga parasitic on *Rhodymenia palmata* (L.) Grev. Brit. Phycol. J. 7(2): 249-253.

Ellis, D.V. and R.T. Wilce.
(1961) Arctic and subarctic examples of intertidal zonation. Arctic 13(4): 224-235.

Farlow, W.G.
(1866) Notes on arctic algae; based principally on collections made at Ungava Bay by Mr. L.M. Turner. Proc. American Acad. Arts Sci., N.S. 13: 469-477.

Farlow, W.G.
(1879) List of algae collected at points in Cumberland Sound during the autumn of 1877. Page 169 *in* L. Kumlien, Contributions to the natural history of Arctic America, made in connection with the Howgate Polar Expedition, 1877-78. Bull. U.S. Natl. Mus., No. 15.

Foslie, M.
(1929) (Ed. by H. Printz.) Contributions to a monograph of the Lithothamnia. Kgl. Norske Videnskab. Selsk. Mus.

Goff, L.J. and K. Cole.
(1975) The biology of *Harveyella mirabilis* (Cryptonemiales, Rhodophyceae). II. Carposporophyte development as related to the taxonomic affiliation of the parasitic red alga, *Harveyella mirabilis*. Phycologia 14(4): 227-238.

Guiry, M.D.
(1974) The occurrence of the red algal parasite *Halosacciocolax lundii* Edelstein in Britain. Brit. Phycol. J. 9(1): 31-35.

Harvey, W.H.
(1858) Nereis boreali-americana: or, contributions to the history of the marine algae of North America. Part III. Chlorospermeae. Smithsonian Contr. Knowl. 10(Art. 2): 1-140.

Hoek, C. van den.
(1963) Revision of the European species of *Cladophora*. Leiden.

Hooker, W.J.
(1825) Botanical appendix. Pages 381-432 *in* Appendix to Captain Parry's journal of a second voyage for the discovery of a northwest passage from the Atlantic to the Pacific, performed in His Majesty's ships Fury and Hecla in the years 1821-22-23. London.

Hooper, R. and G.R. South.
(1974) A taxonomic appraisal of *Callophyllis* and *Euthora* (Rhodophyta). Brit. Phycol. J. 9: 423-428.

Howe, M.A.
(1927) Report on a collection of marine algae made in Hudson Bay. Rep. Canadian Arctic Exp. 1913-18, 4(Part B): 18-30.

Huber, J.
(1892) Contributions à la connaissance des Chaetophorées épiphytes et endophytes et de leurs affinités. Ann. Sci. Natur. Ser. 7, 16: 265-359.

Jaasund, E.
(1957) Marine algae from northern Norway. II. Botan. Not. 110(2): 230-231.

Jaasund, E.
(1960) *Elachista lubrica* Ruprecht and *Elachista fucicola* (Velley) Areschoug. Botan. Mar. 1(3/4): 101-107.

Jaasund, E.
(1963) Beiträge zur Systematik der Norwegischen Braunalgen. Botan. Mar. 5(1): 1-8.

Jaasund, E.
(1965) Aspects of the marine algal vegetation of North Norway. Botan. Gothoburg. No. 4.

Jónsson, H.
(1903a) The marine algae of Iceland. II. Phaeophyceae. Botan. Tidsskr. 25(2): 141-195.

Jónsson, H.
(1903b) The marine algae of Iceland. III. Chlorophyceae. IV. Cyanophyceae. Botan. Tidsskr. 25(3): 337-385.

Jónsson, H.
(1904) The marine algae of East Greenland. Medd. Grønland 30: 1-73.

Jónsson, S.
(1966) Sur l'identification du sporophyte du *Spongomorpha lanosa* (Roth) Kütz. (Acrosiphoniacées). C.R. Acad. Sc. Paris 262(6): 626-629.

Jorde, I.
(1933) Untersuchungen über den Lebenszyklus von *Urospora* Aresch. und *Codiolum* A. Braun. Nytt Mag. Naturvidensk. 73: 1-19.

Kjellman, F.R.
(1883) The algae of the Arctic Sea. K. Svenska Vet.-Akad. Handl. 20(5): 1-349.

Kjellman, F.R.
(1877) Om Spetsbergens marina, klorofyllförande thallophyter. II. K. Svenska Vet.-Akad. Handl. 4(6): 1-61.

Kjellman, F.R.
(1906) Zur Kenntnis der marinen Algenflora von Jan Mayen. Arkiv Botan. 5(14): 1-30.

Kylin, H.
(1944) Die Rhodophyceen der Schwedischen Westküste. Lunds Univ. Arsskr. N.F. Avd. 2, 40(2): 1-104.

Lamb, I.M. and M.H. Zimmerman.
(1964) Marine vegetation of Cape Ann, Essex County, Massachusetts. II. The occurring of the genus *Pantoneura* Kylin (Rhodophyta) in North America. Rhodora 66(767): 234-254.

Lee, R.K.S.
(1973) General ecology of the Canadian Arctic benthic marine algae. Arctic 26(1): 32-43.

Lee, R.W.
(1966) Ecological study of the Mould Bay marine algae. Master of Arts thesis, Univ. Massachusetts, Amherst.

Levring, T.
(1935) Zur Kenntnis der Algenflora von Kullen an der schwedischen Westküste. Lunds Univ. Arsskr., N.F. Avd. 2, 31(4): 1-64.

Loiseaux, S.
(1967) Recherches sur les cycles de développement des Myrionématacées (Phéophycées). I-II. Hécatonématées et Myrionématées. Rev. Gén. Botan. 74(882): 529-578.

Lund, S.
(1933) The Godthaab Expedition 1928. The marine algae. Medd. Grønland 82(4): 1-18.

Lund, S.
(1959) The marine algae of East Greenland. I. Taxonomical part. Medd. Grønland 156(1): 1-247.

McLaren, P.
(1975) Under-ice diving observations in the coastal environments of southeast Melville and western Byam Martin Islands. Geol. Surv. Canada, Pap. 75-1, Part A: 475-477.

Naylor, M.
(1958) Observations on the taxonomy of the genus *Stictyosiphon* Kütz. Rev. Algolog. 3(1): 7-24.

Newroth, P.R.
(1971) Redescriptions of five species of *Phyllophora* and an artificial key to the North Atlantic Phyllophoraceae. Brit. Phycol. J. 6(2): 225-230.

Peterson, G.H.
(1962) The distribution of *Balanus balanoides* (L.) and *Littorina saxatilis,* Olivi, var. *groenlandica,* Mencke in northern West Greenland with remarks on some causative factors. Medd. Grønland 159(9): 1-40.

Peterson, G.H.
(1966) *Balanus balanoides* (L.) (Cirripedia) life cycle and growth in Greenland. Medd. Grønland 159(12): 1-114.

Powell, H.T.
(1957) Studies in the genus *Fucus* L. I. *Fucus distichus* L. emend. Powell. J. Mar. Biol. Assoc. U.K. 36(2): 407-432.

Richardson, J.
(1823) Botanical Appendix. Pages 729-763 *in* J. Franklin, Narrative of a journey to the shore of the Polar Sea, in the years 1819, 20, 21, and 22. London.

Rosenvinge, L.K.
(1893) Grønlands havalger. Medd. Grønland 3(3): 765-981.

Rosenvinge, L.K.
(1899) Deuxième mémoire sur les algues marines du Groenland. Medd. Grønland 20: 1-125.

Rosenvinge, L.K.
(1909) The marine algae of Denmark. Part I. Introduction. Rhodophyceae I (Bangiales and Nemalionales). Kgl. Danske Vidensk. Selsk. Skr., 7. Raekke, naturv. mathem. Afd. 7(1): 1-151.

Rosenvinge, L.K.
(1910) On the marine algae from north-east Greenland (N. of 76° N. Lat.) collected by the "Danmark-Expedition". Medd. Grønland 43(4): 93-133.

Rosenvinge, L.K.
(1926) Marine algae collected by Dr. H.G. Simmons during the 2*nd* Norwegian Arctic Expedition in 1898-1902. Second Norwegian Arctic Exp. "Fram" 1898-1902, No. 37.

Scagel, R.F.
(1966) Marine algae of British Columbia and northern Washington. Part I. Chlorophyceae (green algae). Natl. Mus. Canada Bull. 207.

Setchell, W.A. and F.S. Collins.
(1908) Some algae from Hudson Bay, Rhodora 10(114): 114-116.

Smayda, T.J. and B. Mitchell-Innes.
(1974) Dark survival of autotrophic, planktonic marine diatoms. Mar. Biol. 25(3): 195-202.

South, G.R.
(1974) Contributions to the flora of marine algae of eastern Canada, II. Family Chaetophoraceae. Natur. Can. 101(6): 905-923.

South, G.R.
(1975) Contributions to the flora of marine algae of eastern Canada. III. Order Tilopteridales. Natur. Can. 102: 693-702.

South, R.G., R.G. Hooper and L.M. Irvine
(1972) The life history of *Turnerella pennyi* (Harv.) Schmitz. Brit. Phycol. J. 7: 221-233.

Taylor, W.R.
(1957) Marine algae of the northeastern coast of North America. 2nd Ed. Univ. Michigan Studies, Sci. Ser. Vol. 13.

Waern, M.
(1949) Remarks on Swedish *Lithoderma*. Svensk Botan. Tidsskr. 43(2-3): 633-670.

Waern, M.
(1952) Rocky-shore algae in the Öregrund Archipelago. Acta Phytogeogr. Suecica, No. 30.

West, J.A.
(1967) *Pilayella littoralis* f. *rupincola* from Washington: the life history in culture. J. Phycol. 3(3): 150-153.

Wheldon, R.M.
(1947) Algae. Pages 12-137 *in* N. Polunin, ed., Botany of the Canadian Eastern Arctic. Part II. Thallophyta and Bryophyta. Natl. Mus. Canada Bull. 97, Biol. Ser. 26.

Widdowson, T.B.
(1971) A taxonomic revision of the genus *Alaria* Greville. Syesis 4(1-2): 11-49.

Wilce, R.T.
(1959) The marine algae of the Labrador Peninsula and northwest Newfoundland (ecology and distribution). Natl. Mus. Canada Bull. 158.

Wilce, R.T.
(1960) Studies in the genus *Laminaria*. II. *Laminaria groenlandica* L.K. Rosenvinge. Botan. Not. 113: 203-209.

Wilce, R.T.
(1965) Studies in the genus *Laminaria*. III. A revision of the North Atlantic species of the Simplices Section of *Laminaria*. Botan. Gothoburg. no. 3, p. 247-256.

Wilce, R.T.
(1967) Heterotrophy in arctic sublittoral seaweeds: an hypothesis. Botan. Mar. 10(3/4): 185-197.

Wilce, R.T.
(1968) Observations on the attached algae of the moderately exposed rocky coast in high latitudes. (Unpublished report submitted to the Arctic Institute of North America, Project ONR 353a3-4.)

Woelkerling, W.J.
(1973) The *Audouinella* complex (Rhodophyta) in the western Sargasso Sea. Rhodora 75(801): 78-101.

Woelkerling, W.J.
(1973) The morphology and systematics of the *Audouinella* complex (Acrochaetiaceae, Rhodophyta) in northeastern United States. Rhodora 75(804): 529-621.

Zinova, A.D.
(1955) Opredelitel' krasnykh vodoroslei severnykh morei SSSR. Akad. Nauk SSSR, Moskva-Leningrad. (Key to red algae of the northern seas of the USSR.)

Zinova, A.D.
(1961) Okrasnoi vodorosli *Dilsea integra* (Kjellm.) Rosenv. Akad. Nauk USSR, Moskva-Lenningrad 14: 82-86. (The red alga *Dilsea integra* (Kjellm.) Rosenv.)

Index to Species

Acrochaeta 9
repens 9, **22**
Acrochaetium 11
parvulum 11, **48**
Acrosiphonia 10
arcta 10, **25,** 49
hystrix 10, **26,** 49
Agarum 7, 11
cribosum 7, 11, **45**
turneri **45**
Ahnfeltia 12
plicata 12, 34, **56,** 59
Alaria 11
dolichorhachis **45**
esculenta 11, **45**
grandifolia 11, **46**
musaefolia **45**
oblonga **45**
pylaii 11, **46**
f. *grandifolia* **46**
Antithamnion 12
americanum 12, **59**
boreale 12, **59**
cruciatum **60**
plumula
var. *boreali* **59**
var. *pylaisaei* **60**
pylaisaei 12, **60**
Arthrochaete 9
penetrans 9, **22**
phaeophila **22**
Ascocyclus
foecundus **35**
islandicus **35**
Ascophyllum 11
nodosum 11, **48**
Asperococcus 11
echinatus 11, **40**
Audouinella 11
efflorescens 11, **49**
hallandicum 11, **49**
membranacea **50**
purpurea 11, **49**
spetsbergense 11, **50**
Balanus
balanoides 7
Blidingia 9
marginata 9
subsp. *marginata* 9, **18**
subsp. *subsala* 9, **18**
minima 9, 17, **18,** 25
var. *minima* 9, **18**
var. *ramifera* 9, **18,** 20
Bolbocoleon 9
piliferum 9, **22**
Callithamnion
boreale **60**
pylaisaei **60**
rothii **50**
sparsum **50**
Callithamnium
americanum **59**
Callophyllis 11
cristata 11, 15, **54,** 61
Callymenia
sanguinea **54**
Calothrix
scopulorum 24, 30
Capsosiphon 9
fulvescens 9, 17, **18,** 26
Castagnea
virescens **37**
Ceramium 12
rubrum 12, **60**
tenuissimum 12, **60**
Ceratocolax 12
hartzii 12, **57**
Chaetobolus 9
gibbus 9, **23**
Chaetomorpha 10
aerea **26**
capillaris 27
linum 10, **26**
melagonium 10, 17, 18, 22, 23, **27,** 28, 30, 31, 32, 33, 35, 36, 39, 49, 50, 59
tortuosa **27**
wormskioldii **25**
Chaetophora
maritima **30**
Chaetopteris
plumosa **34**
Chantransia
efflorescens **49**
hallandica **49**
f. *parvula* **48**
microscopica **48**
Chlorochytrium 9
dermatocolax 9, **15**
inclusum 9, **15,** 26
var. *dermatocolax* **15**
schmitzii 9, **16**
Chorda 11
filum 11, 22, **41**
lomentaria **40**
tomentosa 11, 22, **41**
Chordaria 10
flagelliformis 10, 22, **37,** 41
Choreocolax 12
odonthaliae 12, **54**
Cladophora 10, 23, 36, 49
arcta **25**
var. *hystrix* **26**
flexuosa **28**
glaucescens **27**
gracilis **27, 28**
hystrix **26**
lanosa **26**
pachyderma **28**
rudolphiana **28**
sericea 10, **27**
sp. 10, **28**
Clathromorphum 11
circumscriptum **52**
compactum 7, 11, **52**
Codiolum 9
gregarium 9, **15,** 25
nordenskioldianum **15**
pusillum 9, **15**
Coilodesme 11
bulligera 11, **41**
Colaconema 11
membranacea 11, **50**
Conchocelis
rosea **48**
Conferva 4
melagonium **27**
Cruoria 12
arctica 12, **55**
firma **55**
Cruoriopsis 12
hyperborea 12, **55**
Cystoclonium
purpurascens 58
Delesseria
alata **61**
angustissima **61**
baerii **61**
corymbosa **61**
montagnei **61**
rostrata **61**
sinuosa **61**
Dermatocelis 10
laminariae 10, **35**
Desmarestia 10
aculeata 10, 22, 28, 30, **37,** 49
viridis 10, **38**
Desmotrichum 10
balticum **39**
undulatum 10, 23, **39**
Dichloria
viridis **38**
Dictyosiphon 11
foeniculaceus 11, 15, 22, 30, **41,** 49
f. *flaccidus* **41**
f. *hispidus* **41**
hippuroides **41**
hispidus **41**
Dilsea
integra **50**
Diploderma
amplissimum **48**
miniatum **48**
Diplonema
percursum **18**
Dumontia 11
filiformis **50**
incrassata 11, **50**
Ectocarpus 10
aecidioides **36**
confervoides **29**
dasycarpus **29**
farlowii **28**
fasciculatus 10, **29**
firmus **28**
hiemalis **29**
holmii **29**
landsburgii **29**
littoralis **28**
ovatus **29**

penicillatus **29**
siliculosus 10, **29**
stilophorae **30**
tomentosoides **30**
Ectochaete 9
leptochaete 9, **23**
wittrockii 9, **23**
Elachista 10
fasciculata **35**
fucicola 10, **36**
f. *lubrica* **36**
lubrica **36**
Endoderma
leptochaete **23**
wittrockii **23**
Enteromorpha 9
aureola **18**
clathrata 9, **19**
compressa 9, **19**
f. *prolifera* **20**
crinita 9, **20**
erecta **20**
flexuosa 9
subsp. *paradoxa* 9, **20**
groenlandica 9, **20**
intestinalis 9, **19, 20**
var. *compressa* **19**
var. *genuina* **20**
f. *micrococca* **18**
var. *minima* **18**
linza 9, **20**
marginata **18**
micrococca **19**
f. *subsala* **18**
f. *typica* **18**
minima **18, 19**
plumosa **20**
prolifera 9, **20**
subsp. *prolifera* **21**
ramulosa **20**
Entocladia 9
flustrae **24**
viridis 9, **23**
wittrockii **23**
Entonema
aecidioides **36**
Epicladia 9
flustrae 9, **24**
Erythrocladia 11
irregularis 11, **48**
polystromatica 11, **48**
Erythropeltis 11
discigera 11
var. *flustrae* 11, **48**
Erythrotrichia 11
carnea 11, **48**
ceramicola **48**
Eudesme 10
virescens 10, **37**
Euthora
cristata **54**
Floridea 4
Fucus 11, 28, 42
ceranoides 4
distichus 4, 7, 11, 22, 23, 25, 28, 29, 32, 33, 61, 62, 63 35, 39, 40, 41, **46,** 59, 60,
subsp. *anceps* 11, **46**
subsp. *distichus* 11, **46**
subsp. *edentatus* 11, **46**
subsp. *evanescens* 11, **47**
edentatus **46**
evanescens **47**
filiformis **46**
inflatus **46**
f. *distichus* **46**
f. *edentatus* **46**
var. *edentatus* **46**
f. *evanescens* **47**
var. *evanescens* **47**
f. *linearis* **46**
var. *linearis* **46**
linearis **46**
nodosus **48**
vesiculosus 11, **47**
Gayella
polyrhiza **17**
Giffordia 10
ovata 10, **29**
Gloeocystis 9
scopulorum 9, **15**
Gomontia 9
polyrhiza 9, **17**
Gymnogongrus
plicatus **56**
Haemescharia
polygyna **55**
Halosacciocolax 11
kjellmanii 11, **51**
lundii 11, **52**
Halosaccion 12
dumontioides **58**
ramentaceum 12, 15, 35, 36 51, **58,** 61
Halosiphon
tomentosa **42**
Haplospora 10
globosa 10, **35**
Harveyella 12
mirabilis 12, **54**
Hecatonema 10
foecundum 10, **35**
maculans 10, **35**
Hildbrandtia
rosea **52**
Hildenbrandia 11
prototypus 11, 23, **52**
Hormiscia
penicilliformis **25**
Ilea
fascia **40**
Isthmoplea 10
sphaerophora 10, **38**
Kallymenia 11
pennyi 4, **54, 56**
rosacea **56**
schmitzii 12, **54**
septemtrionalis **56**
Kolderupia 10
maritima 10, **30**
Kornmannia 9
leptoderma 9, **19**
Kylinia
hallandica **49**
Laminaria 6, 7, 11, 17, 24, 28, 30, 34, 36, 39, 48, 50, 57, 62
agardii 11, **42**
atrofulva **43**
cuneifolia **42**
digitata 11, **42**
fascia **40**
groenlandica 7, 11, 24, **42,** 43, 44
longicruris 11, 25, 30, 31, 36, **43,** 44, 59
nigripes 11, **43**
phyllitis **43**
saccharina 7, 11, 42, **43**
var. *groenlandica* **43**
solidungula 7, 11, 24, **42,** 43, 44
Laminariocolax 10
tomentosoides 10, **30**
Leptonema
fasciculatum **35**
Leptonematella 10
fasciculata 10, **35**
Leptophytum
foecundum **53**
laeve **53**
Lithoderma 10
extensum **32**
fatiscens 10, 25, **32, 33**
kjellmanii **31**
rosenvingii **33**
subextensum **33**
Lithothamnium 11
circumscriptum **52**
colliculosum **53**
compactum **52**
fasciculatum 52
foecundum 11, **52**
glaciale 11, **53**
granii **53**
laeve 7, 11, **53**
polymorphum **54**
tenue **52**
Litosiphon 10
filiformis 10, **39**
Littorina
saxatilis 7
Melobesia
polymorpha **54**
Membranoptera 12
alata 12, **61**
denticulata 12, **61**
Mesophyllum
lichenoides 52
Microsporangium 10
globosum 10, **36**
Monostroma 9

arcticum 9, **19**
blytti **21**
fuscum **21**
f. *blytti* **21**
var. *blytti* **21**
grevillei
f. *arctica* **19**
var. *arctica* **19**
groenlandicum **20**
leptodermum **19**
oxyspermum **22**
Myriactula
lubrica **36**
Myrionema 10
aecidioides 10, **36**
foecundum **35**
globosum **36**
laminariae **35**
strangulans 10, **36**
Neodilsea 11
integra 11, 15, 22, 23, 28, 30, 31, 32, **50**
Ochlochaete 23
gibbus 23
Odonthalia 12
dentata 12, 54, 61, **64**
floccosa 49, 64
Omphalophyllum 11
ulvaceum 11, **40**
Ostreobium 9
queketti 9, **16**
Ozothallia
nodosa **48**
Pantoneura 12
angustissima 12, **61**
baerii 12, **61**
Percursaria 9
percursa 9, **18**
Petalonia 11
fascia 11, **40**
Petrocelis 12
polygyna 12, **55**
sp. 12, **55**
Peyssonelia 11
johanseni 11, **51**
rosenvingii 11, **51**
Phaeostroma 10
parasiticum 10, **30**
pustulosum 10, **30**
Phloeospora
pumila **39**
subarticulata **39**
tortilis **39**
Phycocelis
globosus **36**
Phycodrys 12
rubens 12, 15, 22, 31, 60, **61**
var. *lingulata* **62**
sinuosa **61**
Phyllaria
dermatodea **42**
Lorea **42**
Phyllitis
fascia **40**
Phyllophora 12
brodiaei **57**
interrupta **57**
membranifolia **58**
truncata 12, 15, 22, 23, 51, **57,** 58, 60, 61, 62, 63
Phymatolithon 11
compactum **52**
laevigatum 11, **54**
polymorphum 11, **54**
Pilayella 10
littoralis 10, 17, 25, **28,** 30, 49
rupincola **28**
varia **28**
Pilinia 9
endophytica 9, **25**
maritima **30**
Pogotrichum
filiforme
var. *penicilliforme* **39**
Polysiphonia 12
arctica 6, 12, 15, 22, 23, 24, 35, 48, 49, **62**
urceolata 12, 15, **63**
Porphyra 11
abyssicola **48**
amplissima **48**
laciniata **48**
f. *typica* **48**
miniata 11, **48**
purpurea 11, **48**
umbilicalis **48**
Prasiola 9
johanseni 9, **16**
Pringsheimia
scutata **24**
Pringsheimiella 9
scutata 9, **24**
Protoderma
marinum **24**
Pseudendoclonium 9
submarinum 9, **24**
Pseudolithoderma 10
extensum 10, 23, 25, **32**
rosenvingii 10, **33**
subextensum **33**
Pseudopringsheimia 9
confluens 9, **24**
fucicola 9, **25**
Ptilota 12
pectinata 12, **60**
plumosa 12, **61**
var. *serrata* **60**
serrata **60**
Punctaria 10
glacialis 10, 22, 23, 28, 30, 31, 32, 35, 36, **40,** 41
plantaginea 11, **40**
Ralfsia 10
clavata 10, 25, **31**
deusta **31**
fungiformis 10, **31**
ovata 10, **31**
pusilla 31
tenuis **31**
verrucosa 10, **31**
Rhizoclonium 10
implexum 17, **26**
kerneri **26**
rigidum **26**
riparium 10, **26**
var. *polyrhizum* **26**
var. *riparium* **26**
tortuosum **26**
Rhodochorton
intermedium **49**
membranaceum **50**
mesocarpum
f. *penicilliformis* **50**
var. *penicilliformis* **50**
penicilliforme **50**
purpureum **49**
f. *intermedium* **49**
rothii **49**
sparsum **50**
spetsbergense **50**
Rhododermis
elegans **51**
parasitica **51**
Rhodomela 12
confervoides 12, **63**
lycopodioides 12, 15, 18, 23, 30, 32, 35, 36, 39, 49, 55, **63,** 64
f. *flagellaris* **63**
fl. *lycopodioides* **63**
subf. *tenera* **63**
f. *tenuissima* **63**
var. *tenuissima* **63**
tenuissima **63**
Rhodophysema 11
elegans 11, **51**
Rhodophyllis 12
dichotoma 12, **56**
veprecula **56**
Rhodymenia 12
interrupta **57**
palmata 12, 23, 28, 39, 52, **59,** 60
Rosenvingiella 9
polyrhiza 9, 15, **17**
Saccorhiza 11
dermatodea 11, **42**
Sarcophyllis
arctica **50**
Scaphospora
arctica **35**
Scytosiphon 11
lomentaria 11, **40**
Soliera
chordalis **58**
Sorapion 10
kjellmanii 10, 23, 25, 31, **32**
Sphacelaria 10, 28
arctica 10, 15, 22, 23, 28, 29, **33,** 50, 59
cirrosa 10, **34**

olivacea **35**
pennata **34**
plumosa 10, 28, **34,** 35, 36, 49, 59, 61, 62, 63
racemosa
var. *arctica* **33**
radicans 10, **35**
Spongomorpha 10
aeruginosa 10, 15, **26**
arcta **25**
hystrix **26**
lanosa 15, **26**
Stictyosiphon 10
tortilis 10, 17, 22, 28, 30, 35, **39,** 41, 49
Streblonema 10
aecidioides **36**
stilophorae 10, **30**
Symphyocarpus 10
strangulans 10, **31**
Turnerella 12
pennyi 4, 12, 15, 23, 30, 55, **56,** 61
septembtrionalis **56**
Ulothrix 9, 19
flacca 9, **17**
implexa **17**
laetevirens 9, **17**
pseudoflacca 9, **17**
speciosa **17**
subflaccida 9, **18**
Ulva 9
crassa **21**
lactuca 9, **21**
var. *rigida* **21**
latissima **21**
rigida 9, **21**
Ulvaria 9
obscura 9
var. *blytti* 9, **21**
oxysperma 9, **22**
Ulvella
confluens **24**
fucicola **25**
Urospora 9
collabens **25**
mirabilis 10, 15, 17, **25**
penicilliformis 15, **25**
wormskjoldii 10, **25**

CALIF ACAD OF SCIENCES LIBRARY
3 1853 00058 9775